ARTICLE INFO

ABSTRACT

Objective: To evaluate the frequency of perceived ethical misconduct in the practice of neuropsychology in Mexico.
Method: One hundred fourteen psychologists answered a survey which assessed perceptions of ethical misconduct in four areas of professional practice in the field of neuropsychology.
Results: The area of professional training contained the highest percentage of perception of ethical misconduct, followed by research and publications, clinical care, and professional relationships.
Conclusion: The high frequency of ethical misconduct perceived by neuropsychology professionals in Mexico is a cause for concern. The results suggest the need to create and implement a system to make sure that professionals follow the ethics standards required by the profession, and to provide consequences for those who fail to do so. The profession of neuropsychology and training of professionals in the field must be regularized in the country, to reduce the frequency of future ethical misconducts.

RESUMEN

Objetivo: Evaluar la frecuencia de percepción de conductas éticamente inadecuadas en la práctica de la neuropsicología en México.
Método: Ciento catorce psicólogos respondieron a una encuesta que evaluaba la percepción de conductas éticamente inadecuadas en cuatro áreas de la práctica profesional de la neuropsicología.

Researc h

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Palabras clave: Ética, neuropsicología, práctica clínica, México.
INTRODUCTION

Neuropsychology today is recognized as an official specialty of psychology (American Psychological Association [APA], 2010). It is defined as the discipline which employs scientific methods to investigate the relationship between brain and human behavior. Neuropsychology arose in the middle of the 20th Century, and continued its development in parallel with psychology and neurology (Benton, 2000).

Neuropsychology professionals apply their knowledge and techniques to clinical aspects such as evaluation, diagnosis, treatment, and rehabilitation of individuals with neurological or developmental problems (APA, 2010). Some of the main disorders treated by neuropsychologists are neurodegenerative diseases (e.g., dementia, Parkinson’s disease, etc.), traumatic brain injury, learning disabilities, and developmental disorders, among others (APA, 2010). Neuropsychologists also work in research and teaching (Lago & Noreña, 2007). Finally, they engage in their practice in a variety of settings, both public and private, which include hospitals, rehabilitation centers, research centers, retirement facilities, and universities, among others (Ubis & Odrioza, 2008).

In Mexico, the field of neuropsychology was established in the early 1980s, with development of multiple lines of research in neuroscience, introduction of neuropsychology at the National Institute of Neurology and Neurosurgery (INNN), and convocation of the International Symposium of Neuropsychology in Morelia, Michoacán (Ostrosky-Solis & Matute, 2009). The first graduate study program in neuropsychology was created in 1989 in the National Autonomous University of Mexico (UNAM), which was the first of its kind in Latin America (Villa, 2008). Today there are six academic institutions (i.e., UNAM, Autonomous University of Nuevo Leon, University of Guadalajara, Mesoamerican University, Autonomous University of Puebla, and Autonomous University of Morelos) accredited by the Public Education Secretary (SEP), which offer programs related to neuropsychology, either at Master’s or Doctorate level.

All areas of psychology in Mexico, including neuropsychology, fall under the purview of the Mexican Psychological Society [MPS] (Stark, Frels, Reyes & Sharma, 2010). As part of its function, the MPS has a Code of Ethics which all psychology professionals are obliged to follow. The main objective of this Ethics Code is to guide the professional, scientific and academic practice of psychology. Its specific functions are to guarantee the wellbeing of those who benefit from psychological services, support various areas of psychological practice, offer decision-making support to psychologists in ethically challenging situations, and educate consumers of mental health services about their rights (MPS, 2007). The ethics code is divided in two parts. The first part lays out the general principles; while the second contains the rules of conduct in regards to the quality of service provision, communication of clinical results, and interpersonal relationships (MPS, 2007).

During the development of last edition of the Ethics Code in 1996, an investigation of the most common ethical problems encountered by Mexican psychologists was conducted. Results indicated that most of the ethical misconduct encountered by Mexican psychologists was related to professional incompetence (34%), and dealt with academic and scientific aspects of their work (23%). Additionally, psychology professionals reported sexual relations and harassment made by professors to patients or students (16%), problems in the use of psychological tests and their interpretation (12%), ambiguous relationships with patients (8%), problems with the confidentiality of information (5%), improper request of payments (1%), and problems with cultural aspects of psychology practice (1%) as other ethically troubling conducts which they have witnessed (MPS, 2007). To our knowledge, this is the only study to date to assess ethical aspects of psychological practice in Mexico, and there are none specifically related to the practice of clinical neuropsychology.
Neuropsychology professionals very often face ethical decisions which can affect their professional performance or the well-being of their patients. Due to scientific and dynamic nature of the profession, frequent evaluation and update of new possible situations which can result in ethical dilemmas is fundamental (MPS, 2007). Consequently, the objective of the present study was to assess the frequency with which neuropsychological professionals perceive ethical misconduct by their colleagues during professional practice of neuropsychology in Mexico.

2. METHOD

2.1 Participants

The sample was comprised of professionals in the field of psychology who met the following inclusion criteria: 1) were at least 18 years of age, 2) had at least an undergraduate degree in psychology, 3) lived in Mexico, and 4) considered themselves neuropsychologists and/or performed neuropsychological activities (evaluation, diagnosis, treatment, teaching or research) during the year previous to the survey.

A total of 125 professional met the inclusion criteria and responded to the first question about ethics, which asked whether they had received formal training in professional ethics. Of these 125 professionals, 114 answered all 19 questions of the ethics survey, and formed the final sample whose data was used in the statistical analyses.

The final sample of 114 participants had an average age of 35.2 (DE=9; range=23-64), where the majority were women (66.7%, n=76). Nearly a quarter (24.6%, n=28) worked in universities, followed by a 22.8% (n=26) who worked in hospitals, 14.9% (n=17) in private practice, and 12.3% (n=14) in other settings (e.g., medical centers, rehabilitation centers, and educational system). The average number of years dedicated to the practice of neuropsychology was 8.3 (SD=7.7; range=1-33 years), while the average number of hours per week spent working in neuropsychology was 25.75 (SD=17.2; range=1-68).

2.2 Instrument

The survey about ethics in the professional practice of neuropsychology was part of a larger survey created by a research team at the University of Deusto (Bilbao, Spain) and Virginia Commonwealth University (United States). The survey consisted of 85 questions divided in six areas: the first eight about sociodemographic characteristics, the next 14 about professional training, eight about current work situation, 14 about evaluation and diagnosis, seven related to rehabilitation, six about teaching, ten about research, and the final 19 questions about the perception of ethical misconduct during their professional practice. Due to anonymous nature of participation, no personal information that could identify participant was gathered.

An extensive literature revision was conducted prior to survey creation, where for the ethics section specifically the areas of interest for neuropsychology were identified. Subsequently a survey to evaluate perceptions of ethical misconduct performed by colleagues in four different topical areas was developed. These areas included professional training, clinical care, research and publications, and professional relationships. The survey was sent to a group of neuropsychological experts from Mexico (e.g., INNN) in order to evaluate its cultural and linguistic appropriateness. Expert feedback was incorporated into the final version of the survey, which was uploaded to an online survey platform (www.surveymonkey.com). Subsequently, a pilot study was conducted in order to assess the survey validity and attainability prior to its distribution. The online survey platform was configured in a way which prevented multiple responses to the survey from the same computer.

Only the results of the last section of the survey which assessed perception of ethical misconduct are presented in this study. Participants had to answer “yes” or “no” to a series of questions which asked whether or not they knew other neuropsychologist(s) in their country who engaged in ethically questionable behaviors. Some examples of the questions in this section were “Discuss information about their patients with people outside of their professional practice who are not involved in treating the patient”, “Interact with their patients outside of their professional relationship with the patient”, and “Advertise and present themselves as neuropsychologists but have not actually had the proper training or expertise”.

2.3 Procedure

This study was approved by the ethics committee at the University of Deusto. Data collection was conducted between July 2013 and January of 2014. To maximize recruitment and participation, an electronic communication which invited neuropsychology professionals to participate in the study was sent to current professional leaders in neuropsychology in Mexico (e.g., professionals at the Mexican Neuropsychological Association, etc.). This message included survey hyperlink for ease of
In the area of clinical care, more than half of the participants (53.5%) indicated knowing someone who does not have the abilities or training to work with persons who are culturally different from them. Further, 37.7% indicated that some colleagues provide results of neuropsychological evaluations in such a way that patients and other professionals are not likely to understand, followed by 36.8% who mentioned knowing a colleague(s) who base their diagnoses and conclusions on information gathered improperly or who ignore important sources of data. A third of participants (33.3%) indicated knowing other neuropsychology professionals who use treatments of questionable efficiency or that can even be harmful for the patients. The three least perceived behaviors where speaking about their patients with others who did not belong to their clinical practice or who were not involved in the case (26.3%), denying or providing substandard services to patients who are unable to pay (25.4%), and keeping silent or not referring appropriately when important medical or psychological issues arose (22.8%).

The final portion of the survey assessed perceptions of ethical misconducts in the context of professional relationships with colleagues, patients, and students. Regarding to relationships with colleagues, 28.9% reported knowing someone who took deliberate actions to damage the reputation of their colleague(s). Additionally, 36% indicated knowing someone who is negligent and/or disrespectful to their students, and 14.9% reported knowing someone who engaged in sexual relationships with their students. In regards to relationships with patients, 18.4% indicated knowing other professionals who know or interact with their patients outside of their professional relationship with the patient, 17.5% who accept forms of payments for their service from patients other than money, and finally 2.6% who engage in sexual relationships with their patients.

In the area research and publications, 48.2% indicated knowing someone who appears as an author in publications where they made no significant contribution; 46.5% indicated knowing someone who present the work of their students as their own. Misrepresenting the results of research or creating fake data in order to publish articles or give professional presentations was a less frequently perceived misconduct, with 21.9% of respondents indicating knowing someone who engages in this misconduct.

3. RESULTS

This survey assessed the incidence of ethical misconduct perceived by a group of neuropsychology professionals in the practice of their colleagues in four different areas: professional training, clinical care, research and publications, and professional relationships with colleagues, students and patients. Each one of these areas included at least three questions. Results were compiled using a frequency analysis to evaluate the incidence of perceived ethical misconduct carried out by another professional(s) who work in neuropsychology in Mexico. The area of professional training was revealed as having the highest average frequency of perception of ethically troubling behavior with 47.9%. Research and publications came in second with the average of 38.8%, followed by clinical care with 33.7%, and finally professional relationships with 19.7%.

The section regarding professional training consisted of three questions which asked whether the participants knew of other neuropsychologists who practice neuropsychology without the necessary qualifications. The majority of respondents (63.2%) indicated knowing someone who does not possess adequate training and experience to be working as a neuropsychologist, and 60.5% indicated to knowing someone who advertise and present themselves as neuropsychologists without the proper training or expertise. Finally, 20.2% perceived that some neuropsychologists testify in judicial processes without the appropriate expertise.

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4. DISCUSSION

To date, there have been no studies concerning ethical issues in neuropsychology in Mexico. Thus, the objective of this study was to identify the frequency of perceived ethical misconduct by neuropsychologists or psychologists who engage in neuropsychological activities (evaluation, diagnosis, treatment, teaching or research) in Mexico during the year previous to the study. Results show a high frequency of these perceptions, which has important implications for the field of neuropsychology in Mexico.
The area in which more misconduct was perceived was professional training, followed by research and publications, clinical care, and professional relationships.

In professional training, over half of participants indicated knowing someone who advertised themselves as a neuropsychologist or worked as such without possessing appropriate training and/or experience. This could be explained in part by the lack of academic neuropsychological programs in the country. Currently there are only six postgraduate programs, almost all of which are located in the center of the country. In fact, a number of these postgraduate programs, while highly regarded and very competitive, offer a general psychology focus and are not specifically neuropsychology oriented; few offer continuing education courses. It may be important to create more neuropsychological postgraduate programs and to make them more geographically accessible to the professionals in the county. These programs would require specialized, experienced instructors who are well-versed in clinical and research aspects of neuropsychology in order to facilitate successful training of future generation of professionals in the field. Current programs (e.g., PROMEP), which aim to provide specialized training in the institutions of higher learning in Mexico, incorporate new professionals who were trained domestically as well as abroad, and could play a role in providing competent full-time staff to these programs.

The lack of regulation and requirements needed to practice neuropsychology may also lead to a high incidence of other perceived ethical misconduct in the area of professional training. Due to lack of regulations, different universities may teach different courses which they consider relevant in the training of professionals in neuropsychology, which results in heterogeneity of academic requirements. It is also recommendable for all academic programs to include supervised clinical practice as part of their curricula. Further, it is important for professionals to have access to competent clinical supervision in order to receive feedback on their work and to be continuously improving in their skills and abilities. Finally, there ought to be a mechanism to establish qualification required to practice the profession and to create a common curriculum in neuropsychology for postgraduate training programs.

In the area of research and publications, appearing as author on a published manuscript without a significant contribution, and presenting work of students as own were the most frequently perceived ethically troubling behaviors. This could also be attributed to a number of possible reasons. A cursory review of academic curricula of graduate programs in psychology which are available online revealed that while some included coursework related to research, none included courses on the topics of professional ethics in clinical practice or research. Further, continuing education courses on the topic of ethics in the practice of (neuro) psychology are rarely found and are mostly unknown for health care professionals other than medical doctors/physicians.

This lack of knowledge about ethical aspects in research and possible legal consequences may be a contributing factor to perpetuation of ethical misconduct in research and publications. Even though there are published manuals about authorship and co-authorship, as well as established rules about proper attribution of others’ intellectual output, many individuals who work in the area of research might not be aware of them. This suggests the need to distribute this information and knowledge, starting in undergraduate programs when students are first introduced to principles of scientific research in order to promote original research ideas, instill good research practices, and identify and avoid unethical behaviors. Likewise, it may be helpful for universities to have access to anti-plagiarism software/programs which would allow for periodic checks of quality of academic work produced by students as well as more senior researchers.

Pressure to publish by institutions or universities could be another reason for the high incidence of unethical behaviors, since professional status and salary of researchers often depend on their scientific output. In Mexico specifically, what may exert pressure on professionals is the attempt to enter and remain in the National System of Researchers (SNI). Being a part of the SNI may offer some advantages, such as access to professional opportunities or increased status; however, in order to enter and stay in the system, a certain number of academic publications is required. Such high level of pressure may drive some individuals to engage in unethical research conduct, such as falsifying data or results of research projects with the goal of publishing scientific articles. While such behavior was less frequently endorsed by the participants, it could still have serious consequences and lead to ineffectual evaluation methods or treatments which can be potentially harmful to patients. It would be important to encourage researchers to create publications of higher quality rather than be concerned with only the quantity of their published
manuscripts, which could reduce the practice of ethical misconduct in this area of research.

In the area of clinical care, knowing someone without the ability or training to work with culturally different patients was the most frequently perceived behavior. The great cultural diversity in Mexico and the geographic location of training programs (since most of them are located in urban areas), could possibly contribute to the high perception of this ethically troubling behavior. There are no specific instruments or treatments designed for indigenous populations, which hinders clinical work and research with individuals from these groups. Furthermore, there are no adapted or validated instruments for individuals with physical impairments or serious sensory disturbances, which hampers the precision of diagnosis and, consequently, the neuropsychological treatment that should be implemented.

Even though the creation of such instruments would be of great utility to provide adequate treatments to a diverse population, this prospect faces some challenges. First, the lack of funding and interest on the part of the government and private enterprises to carry out research projects which aim to establish normative values for neuropsychological instruments with indigenous populations is a major obstacle. Second, there are other barriers which make this more problematic, such as difficulties with physical access to the communities where indigenous collectives reside, problems with language and communication, as well as possible specific characteristics of each culture (e.g., traditions, or sense of autonomy that makes them reject external intrusion into their culture). It would be important to look for solutions to these barriers and develop instruments and treatments applicable to different indigenous ethnicities so they can benefit without foregoing their cultural and traditional values.

Participants also perceived that some neuropsychology professionals build their diagnosis and conclusions based on data obtained in an inadequate way and that they interpret and return the results in a way that neither the patients nor other professionals can understand. This can be due to the lack of instruments adapted to Mexican population, which may lead some professionals who do not have access to normative data needed to score instruments and interpret the results to issue inaccurate diagnostic impressions. Furthermore, the lack of professional training in the instrument application and interpretation could lead to their poor application and, therefore, clinical reports of poor quality. This can also explain why some participants perceived that other neuropsychologists apply treatments with questionable efficiency which that can even be harmful for the patients. It is fundamental to adapt and create normative data for instruments which are most commonly used by neuropsychologists in Mexico and to provide training on their correct use, as well as on writing clinical reports and on updated, effective, empirically-supported treatments. This could be done through continuous education courses, which would include different aspects of evaluation, diagnosis, and choice of treatment.

Finally, in the area of professional relationships, the most perceived ethical misconduct was being negligent and/or disrespectful to students. Currently, very few universities have a specific organism which regulates and punishes inappropriate relationships between professors and students, which may leave some students unprotected from possible abusive behavior conducted by their professors. This could be related to the fact that some participants indicated knowing someone who engaged in sexual relations with their student(s). Even though this practice is unacceptable, generally it is not explicitly prohibited by rules or regulations; in case where such rules do exist, they may not be well known, or are not applied. There should be an independent review mechanism in universities which would regulate and mediate professor-student relationships, where both sides could seek consultation in case of problems of any kind.

Another highly important matter inside the area of professional relationships was the perception that some neuropsychologists engaged in deliberate actions to hurt the reputation of their colleagues. Finding this type of behaviors in Mexico is common, and like in other countries goes unpunished (e.g., by suspending professional license to practice psychology). Lately, with the development of social networks, many professionals may use them to write disparagingly about their colleagues, since internet provides a certain amount of distance and anonymity. With social media, people feel freer to comment on anything that they would not otherwise do or would have done differently. This way, it is possible to speak poorly about one’s colleagues or write offensive or disrespectful messages, to hurt professional reputation of other professionals, without having any kind of filter, consideration, or repercussion. This kind of behavior should be rejected categorically, and some mechanisms to reduce its instance and punish individuals who engage in such behavior should be put in place.
In regard to professional-patient relationships, some participants indicated knowing others who socialize with their patients outside of clinical relationship. This may be due to the lack of knowledge about ethical norms or, in small towns, this behavior may be difficult or impossible to avoid. Some professionals may decide to meet with their patients outside of consult with therapeutic purposes. However, ethical misconduct may occur when this is no clinical/therapeutic purpose for the meeting, since it could be harmful for the patient’s therapeutic process. Similarly, some participants indicated knowing someone who engages in sexual relation with their patient(s), although to a much smaller degree. This could also be potentially attributable to lack of regulation and consequences for such behavior. Currently there are no processes (legal or professional) that reprimand such behavior, and, consequently, it would be advisable to consider creating a mechanism which would penalize such unethical conduct (e.g., via professional sanctions, or legal consequences).

4.1 Limitations and future directions

Certain limitations should be taken into consideration while examining the results of the present study.

1. Participants were asked if they knew other neuropsychologist(s) who engaged in ethical misconduct, and not whether they themselves committed such acts. Even though this can promote honesty and reduce a possible social desirability bias, it could have an effect on obtained results by not gathering information about the entirely of unethical conduct. Consequently, for future research, questions may need to be phrased in such a way as to inquire whether the participants and/or others have engaged in questionable ethical behavior.

2. In regards to the structure of the questions, it is not possible to know the number of professionals who engage in ethical misconduct, only whether such behavior was perceived. Furthermore, some participants may have interpreted questions in a different way. For example in the item “Interact with their patients outside of their professional relationship with the patient”, the word “interact” can be interpreted in different ways.

3. The ethics section was the last part of an extended survey which assessed different aspects of neuropsychology practice. This might have resulted in sample attrition, since some participant could have abandoned the survey before this last section. Additionally, since the items were grouped in one section, participants might have perceived the ethical nature of the questions and could have been influenced by social desirability. For future studies, ethics questions may need to be distributed throughout the survey.

4. This sample was limited to neuropsychologists and psychologists who practiced neuropsychology in Mexico in the year previous to the survey. Consequently, the results can’t be generalized to others professionals working in this field or who have not been working for over a year (e.g., retired, unemployed). It would be important to include a larger sample of participants in future studies in order to obtain more information.

5. The study has a transversal design, and it is not possible to know if or how perception of ethical misconduct changes over time. A longitudinal study would be helpful to obtain more information on ethics in neuropsychological practice in Mexico.

6. The survey did not include open-ended questions, and no information about other perceived unethical behaviors was collected besides from those specifically asked. Similarly, no qualitative data was obtained.

7. Results are based upon perceptions, so the actual incidence of ethical misconduct remains unknown. Developing research using more objective measurements, such as complaints made to neuropsychological associations and institutions, should help to obtain more information about the frequency and extent of unethical behavior within neuropsychology in Mexico.

8. Methodology employed for distribution of the survey could have precluded participation of some individuals. Since it took place online, it is possible that professionals without access to a computer or internet were not able to take part in the survey. Additionally, by distributing the survey though professional and academic networks, professionals outside of those networks likely also did not get access to the survey.

9. Results can not be generalized to other countries, since they only represent professionals who practice neuropsychology in Mexico.

5. CONCLUSION

Professionals who practice neuropsychology in Mexico perceive a high frequency of ethical misconduct perpetrated by others in the field. Both the Mexican Psychological Society and neuropsychological associations in the country should take steps to make sure that professionals follow the ethics standards...
required by the profession, and to create consequences for those who fail to do so. Neuropsychological practice as well as the training of future professionals should be regularized in the country, which will have an effect of reducing the frequency of perception of future ethical misconducts. The society deserves not only well prepared professionals, but also professionals who are capable of making good use of their profession for the benefit of society at large.

6. REFERENCES


