

Torture and Its Consequences: A Challenge to Clinical Neuropsychology

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The high incidence of head trauma and other causes of brain damage during political torture challenges psychologists and other health professionals to consider the need for thorough neurological and neuropsychological evaluations of the survivors they may treat. In this article, the authors argue for contributions to the assessment, documentation, and rehabilitation of the consequences of torture from the perspective of clinical neuropsychology on the basis of ethical, humanitarian, and epidemiological considerations. Traumatic brain injury and posttraumatic stress disorder are among the most common sequelae of torture. Neuropsychologists are uniquely qualified to make significant contributions in this area. Indications and limitations of the utility of neuropsychological assessment in the documentation of torture are discussed, and a brief clinical case study is provided.

Thousands of psychologists worldwide have been active in helping large numbers of survivors recover from torture, and their number has steadily grown (Gorman, 2001). To date, neuropsychologists have hardly been represented in this effort, although their engagement could be very valuable to the recovery of survivors. The practicing neuropsychologist who wishes to contribute to the welfare of these most deserving individuals faces a number of challenges and opportunities that are addressed in this article. For information on incidence and prevalence of politically based torture, as well as worldwide efforts in torture rehabilitation, the reader is referred to the overview provided by Gorman (2001) as well as Jaranson (1995, 1998), Başoğlu (1992), and Suedfeld (1990).

The medical and psychological documentation of torture and the treatment of its consequences have so far been the domain of

physicians and clinical psychologists. While there is a general literature on the psychobiology of trauma (e.g., van der Kolk, 1994), a discussion of the sequelae of torture from the perspective of clinical neuropsychology has so far been lacking. Presently, there does not appear to be any reference in the literature concerning the neuropsychological assessment of torture victims. The pertinent body of literature concerns various types of head trauma and the neuropsychological assessment of posttraumatic stress disorder (PTSD) in general. Even as torture rehabilitation is recognized as an area of subspecialization within health care (Jaranson, 1998), the neuropsychological aspects of assessment and rehabilitation are nowhere to be found. This situation is particularly remarkable in light of the fact that a comprehensive conceptualization of torture sequelae benefits from an understanding of brain–behavior relations.

The incidence of traumatic brain injury (TBI) and PTSD are very high within the population of torture survivors. The case has been made clearly with regard to PTSD. For example, Mollica, Wyshak, and Lavelle (1987) reported a 50% incidence of PTSD among Southeast Asian refugees, many of whom experienced torture. The same cannot be stated with regard to TBI, even though one seminal study of 200 torture survivors reported a 73% incidence of having suffered blows to the head as part of torture (Rasmussen, 1990). The consequences of this high level of head trauma, however, have not been studied adequately. Thus, etiological and epidemiological considerations alone warrant the involvement of neuropsychologists in this field. While neuropsychological rehabilitation, including cognitive rehabilitation therapy (CRT; Gianutsos, 1991), might be foremost in importance to the care of torture survivors, there are no published reports or data available on this subject, and we must confine our discussion here to the limited experience gathered in the area of neuropsychological assessment practice.

Case Illustration

A.B. was a man in his fifties who came to a treatment center for torture survivors in the context of his application for political

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THE AUTHORS would like to thank Arnold Purisch and Lidia Artiola for their review and support of previous versions of this article.

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asylum in the United States. He was a member of a widely persecuted minority group and reported having been falsely accused of political activity and severely beaten by the police in his country of origin in 1996. His brother was killed by the same police force that tortured him. Mr. B.'s attorney in the United States referred him for a medical evaluation to assess for evidence of torture for his asylum hearing.

The physician's report documented the presence of a scar on the right fronto-temporal area of the head, approximately 2.5 cm in length and consistent with the impact of a blunt instrument on the skull. The medical report further stated that many of the patient's teeth were missing on the right side of his mouth. The patient stated that he suffered from hearing loss in his right ear as well. It was noted that the patient was poorly oriented and unable to state his exact age. He appeared paranoid and was only able to cooperate with the examination because of the repeated insistence and encouragement of his daughter, who accompanied him and who had been taking care of him since his arrival in the United States. The patient's daughter reported that he had been extremely fearful, unable to sleep, hopeless, and in need of constant supervision. The physician diagnosed the presence of PTSD and requested a neuropsychological consultation because of suspected TBI.

The patient was examined in the presence of his daughter, who served as interpreter and provided historical information. Whenever possible, the use of a family member as translator should be discouraged in favor of an independent interpreter. However, this had to be rejected in this case because of the patient's inability to tolerate this.

During the course of the neuropsychological evaluation, significant additional history was obtained from the patient and his daughter, information which had not been elicited during the medical examination. It should be noted that in cases of political persecution the absence of medical records is typical and that historical information provided by alleged victims must be considered with caution, particularly in cases of asylum applications. With this cautionary remark in mind, we provide Mr. B.'s history, as follows. Subsequent to Mr. B.'s coma, which lasted for several days, he was delirious and continuously talked of running away for several days, according to a woman who was in the hospital with him and who told him this later. A male friend told him that he had not been able to remember how to use a toilet, that he had soiled himself, and that the friend had been cleaning him. The patient had no memory of these events. He added that the doctors at the hospital had initially given him a poor prognosis and thought he would not survive. He said twice during the interview that there was "bad blood coming down through his nose" due to the injury, but it remained unclear whether this was blood, cerebrospinal fluid, or both.

At the time of the evaluation, Mr. B. was being treated by a community psychiatrist who had prescribed an antipsychotic, presumably because of his paranoia, and an antidepressant for his depression and severe sleep disturbance. He was only taking the latter at the time of the examination and reported sleeping better, although feeling sedated.

Throughout the examination, the patient gave the impression of being dependent on his daughter, like a child. He remained suspicious of what the examiner was doing in spite of explanations and reassurances that the examiner had no connections with the police in his native country. During most of the interview and examina-

tion he turned sideways and looked at his daughter and avoided looking at the examiner. Almost all tests and procedures were discontinued early because the patient was unable to perform the tasks, although he tried to do his best once he was engaged in the task. The level of his impairment was quite evident, and it seemed unnecessary to upset him more than he already was by exposing him to repeated failure.

On examination, the patient exhibited (a) a very impaired ability to understand and follow directions, (b) apraxia, (c) perseveration, (d) disinhibition, and (e) motor slowing. When asked to demonstrate how he would cut with scissors, he complained that his daughter would ask him to cut flowers or roses and that he had found himself quite unable to do so. He added that he used to be able to drive a tractor and cut a lot of things on his farm. When he was given a piece of paper and asked to cut it in half, he held the scissors awkwardly and upside down and required about a minute to finish the task. When questioned about any dressing apraxia, the patient stated that he was able to tie his shoes but that his brother-in-law had to help him with zippers on his clothes at times. He also stated that he was able to button a shirt but only very slowly. Prompted by interview questions and observation of the patient's failure on tasks, the daughter contributed numerous anecdotes of the patient's impairment in daily functioning and complained about how much she needed to look after him.

When asked to identify 10 common objects in a bag by touch (Fuld, 1977), the patient was unable to inhibit the impulse to look at an object while trying to identify it by touch and needed to have instructions repeated again and again. Consistent with his history of poor memory, as reported by his daughter, the patient was only able to remember 4 out of 10 objects that had been presented during the touch trial, which was particularly poor because he had been exposed to the objects far longer than he would have been under standard administration conditions.

On sensory-perceptual functions, the patient showed five left-sided suppressions on bilateral touch in 10 trials. According to the physician's and the patient's report, hearing loss should have been present on the right side. On examination, however, the patient showed hearing loss in the left ear. The latter was remarkable for its inconsistency with the patient's self report and because it was consistent with the left-sided suppressions on touch, which pointed toward brain impairment of the right hemisphere.

It was concluded that the interview and test results revealed evidence of severe cognitive impairment as a result of a TBI. The patient's paranoia did not have a primary psychotic quality in the sense that it was uniform, nonbizarre, and related specifically to his trauma history. In context, it was best accounted for by a combination of the effects of severe traumatization and feelings of helplessness associated with the loss of brain functioning. The results of the examination were made available to the patient's attorney in the form of a report in order to support his application for political asylum, which was successful. The treating psychiatrist was also informed of the evaluation results in order to aid his treatment, which had been based on the assumption that the patient suffered from a primary psychotic disorder. Lastly, education concerning the patient's condition, validation, and support were provided for the daughter, who was the primary caregiver and who was grateful for the information she was given. Unfortunately, the patient did not live within the immediate area of the treatment center and could not be motivated for further follow-up. His

daughter stated that he simply refused to comply with her efforts because he continued to be too fearful.

Ethical Considerations

For a variety of reasons, survivors of torture constitute perhaps the single most vulnerable clinical population. Torture survivors have suffered unspeakable violence, and the frequently resulting profound destruction of trust leads to a situation in which the encounter with any person in an official capacity, including medical and psychological examiners, will often create profound distress and carry the potential for retraumatization. Therefore, particular care is needed when assessment and treatment of torture survivors is undertaken. The creation of a trusting atmosphere is paramount in the evaluation of torture victims. Sufficient time must be allowed to establish rapport, and the rationale for the evaluation and all procedures must be carefully explained. The examiner should emphasize that the evaluation may be discontinued at any time and that breaks may be taken whenever the examinee wishes to do so. In general, any ethical principles that apply to medical and psychological evaluation procedures must be taken particularly seriously (for general medical and psychological assessment considerations, see Iacopino et al., in press; U. Jacobs, 2000; Peel, Hinshelwood, & Forrest, 2000).

Any kind of medical or psychological assessment procedure has the potential for retraumatization in survivors of torture. Generally speaking, the potential for eliciting conditioned responses of fear and helplessness becomes greater when such procedures are invasive or when they have resemblance to torture methods. Therefore, neuropsychologists must exercise great care in order to minimize any potential retraumatization of the subject. To cite an obvious example specific to neuropsychological testing, we point out that it would be potentially damaging to proceed with a standard administration of the Tactual Performance Test and routinely blindfold the subject. For most torture victims who have experienced blindfolding during detention and torture, and even for those who were not blindfolded, it could be traumatic to introduce the experience of helplessness inherent in this procedure. In fact, any form of neuropsychological testing in itself may be problematic, regardless of the particular instrument used. Being asked to give maximum effort on an unfamiliar task, being observed and timed with a stopwatch, and in general being asked to perform rather than having a dialogue may prove to be too stressful or reminiscent of a torture experience.

This does not mean that such obstacles cannot be overcome or that retraumatization should be expected to occur in most cases. However, the examiner must be familiar with these potential problems in order to take extra time and effort to establish rapport and an atmosphere of safety in evaluating individuals who have suffered extreme traumatization. It may be necessary to deviate from established assessment routines in order to protect victims of torture against retraumatization and to protect the integrity of the assessment procedure itself. The reader may note that in the case study described above, an exception to general rules was made by allowing a close relative to provide translation and that repeated assurances were required to address the survivor's perception of the examiner as a potential adversary.

Use of Neuropsychological Assessment in Documenting Evidence of Torture

Given the aforementioned lack of literature on this topic, the following discussion is primarily based on (a) Uwe Jacobs clinical experience in conducting neuropsychological evaluations of torture survivors, (b) general principles of working with survivors of torture in other clinical contexts, (c) the application of general principles of neuropsychological practice that have been developed with other subject populations, and (d) a thorough understanding of the limitations of neuropsychological assessments with the specific population of torture survivors.

The Clinical Situation

Clinicians encounter survivors of torture in a wide variety of political, social, and clinical contexts. Evaluation and documentation may occur during or immediately following detention, with considerable risk of reprisals by authorities for survivors and evaluators. At the other end of the spectrum, survivors may be evaluated and treated in countries of refuge, often years after torture occurred and often without their clinicians knowing their history of torture (because torture victims frequently do not reveal such a history in general primary care settings). For the purpose of this article, we shall limit our discussion to the latter situation. It should be noted that one of the central future goals of involving neuropsychologists in the care of torture victims is to promote neuropsychological rehabilitation. However, we are not aware that this has been undertaken, and there is currently no literature on the subject.

In evaluating behavioral problems in individuals who are known or suspected to have suffered torture, there are two primary indications for neuropsychological assessment: (a) suspicion of or evidence of brain injury and (b) presence of PTSD. While both sets of conditions have areas of overlap and will often coincide, it is only the former that is a typical and traditional application of clinical neuropsychology, whereas the latter is relatively new (Knight, 1997).

Brain Injury in Torture Victims

Causes

Brain injury in torture victims may result from various types of head trauma and metabolic disturbances that can be inflicted during periods of persecution, detention, and torture. This may include gunshot wounds, effects of poisoning and malnutrition as a result of starvation or forced ingestion of harmful substances, effects of anoxia resulting from asphyxiation and near drowning, and, most commonly, blows to the head suffered during beatings. In two samples of torture survivors, blows to the head were the second most frequently cited form of bodily abuse, second only to general beatings to the body. Rasmussen (1990) reported beatings to the body in 97% of cases and severe beatings to the head in 58% of cases. Traue and colleagues (Traue, Schwarz-Langer, & Gurriss, 1997) reported beatings to the body in 58% of cases and beatings to the head in 45% of cases. Thus, the potential for resulting brain damage must be considered high among torture victims.

Assessment

Closed head injuries resulting in mild to moderate levels of long-term impairment are perhaps the most commonly assessed cause of neuropsychological abnormality among torture victims. Signs of injury may include scars on the head, but brain lesions may not be detected by structural diagnostic imaging, and although functional imaging techniques are promising, their cost is currently prohibitive for the population in question. Mild to moderate levels of brain damage might be overlooked or underestimated by treating mental health professionals because symptoms of depression and posttraumatic stress are likely to figure prominently in the clinical picture, resulting in less attention being paid to the potential effect of head trauma.

Commonly, the subjective complaints of survivors include difficulties with attention, concentration, and short-term memory, which can be the result of either brain impairment or PTSD. Since the aforementioned complaints are so common in survivors suffering from PTSD, the question of whether they are actually due to head injury may not even be asked. Lack of proper neuropsychological diagnosis will typically result in inadequate treatment plans and treatment failures that are then not properly understood. For the forensic documentation of torture, neuropsychological evaluations can make specific contributions. For example, the documentation of significant problems in memory and executive functioning as a result of a brain injury sustained during torture may constitute crucial evidence for a claim to political asylum and may allow an immigration judge to grant asylum even though the applicant did not follow proper procedures and had difficulty in providing effective testimony. It should be apparent that questions about memory are central to the documentation of torture and that memory assessment is the natural domain of neuropsychologists.

Differential Diagnosis

The diagnostician must rely, in an initial phase of examination, on reported history of head trauma and the course of symptomatology. As is usually the case with brain injured subjects, information from third parties—particularly relatives—might prove most helpful, not only with respect to current problems but also for comparisons with premorbid functioning. It must be remembered that brain injured subjects often have great difficulty articulating or even appreciating their limitations because they are, so to speak, “inside” the problem (Lezak, 1995).

In cases that possibly involve brain injury, PTSD, or both, differential diagnostic assessment is critical. Prognosis and treatment differ significantly, owing to the fact that PTSD symptoms are potentially reversible with treatment, whereas deficits secondary to brain injury have a much more limited prognosis for recovery and require neuropsychological rehabilitation, as opposed to psychotherapy and/or psychotropic medication alone. In gathering first impressions regarding the difference between organic brain impairment and PTSD, an assessment concerning the chronicity of symptoms is a helpful starting point. If symptoms of poor attention, concentration, and memory are observed to fluctuate over time and to covary with levels of anxiety and depression, this is more likely due to the phasic nature of PTSD. On the other hand, if impairment seems to appear chronic and lack fluctuation and when complaints and observations in that regard are offered by

family members, the possibility of brain impairment should be entertained, even in the initial absence of a clear history of head trauma or other causes of brain damage.

There is controversy concerning the question of whether TBI may secondarily cause PTSD (McAllister, 1994; Price, 1994; Resnick, 1997). In the case of motor vehicle accidents, falls, and other civil cases of TBI, there is evidence that TBI and PTSD frequently do not coincide and may in these cases even be mutually incompatible (Sbordone & Liter, 1995), although individual cases have been reported (Horton, 1993). However, the assumption that TBI and PTSD are mutually exclusive has faced increasing criticism (Joseph & Masterson, 1999), and it has been shown that PTSD may be present in cases involving neurogenic amnesia for the traumatic event (Layton & Wardi-Zonna, 1995). In general, any findings based on studies that involve concussions resulting from accidents or other brief traumatic events have at best limited application in torture cases. In such cases, a prolonged history of detention, torture, and persecution may involve TBI as merely one of its components. The fact that torture is a form of violence perpetrated by humans on humans, which results in extreme fear, distinguishes it from many other situations in which TBI may occur. Thus, loss of consciousness and amnesia following TBI will not protect against the development of PTSD symptoms in cases of torture.

Neurological Evaluation and Referral

If there is a suspicion of brain injury in a case of torture, the usual first step is to consider a referral to a physician for further neurological examination. Depending on initial findings, the physician may then consult a neurologist, order diagnostic tests, or do both. An extensive medical work-up, specific neurological consultation, and neuropsychological evaluation, when available, are among the possibilities to be considered. The diagnostic use of neuropsychological evaluation procedures are particularly indicated if (a) the purpose of the evaluation is forensic in nature (e.g., in assessing an individual while in detention and there is suspicion of brain injury), (b) the purpose of the evaluation is forensic in nature and there is a lack of gross neurological disturbance, (c) reported symptoms are predominantly cognitive in nature, or (d) a differential diagnosis between brain impairment and PTSD has to be made. However, regardless of the question of differential diagnosis, neuropsychological assessment may constitute the first step for neuropsychological rehabilitation by providing a comprehensive description of behavioral problems and their etiology.

Limitations of Neuropsychological Assessment

General Considerations

There are a number of common factors complicating the assessment of torture survivors generally. Clinicians must work under very difficult conditions when assessments take place while torture victims are still in detention. This may be the case, for example, when international organizations conduct independent evaluations of political prisoners. When torture survivors have managed to flee to countries of asylum, examiners may face other challenges, including the inability to conduct evaluations in the survivor's native language and the need to work through interpreters. In

addition, the often extreme nature of traumatization may not allow examiners to follow a routine clinical assessment strategy. Torture survivors sometimes fear that examiners may have secret connections with the persecuting governments. Basic trust in medical personnel and procedures cannot be assumed. Any authority, including examiners, can be experienced as threatening. This is not merely due to the general authority status of health professionals but also because medical personnel have been willing and unwilling participants in torture in a surprisingly high number of situations (Iacopino, Heisler, Pishevar, & Kirschner, 1996; Rasmussen, 1990).

Selection of Procedures and Tests and Reliance on Population-Based Norms

The selection of neuropsychological evaluation procedures is subject to the limitations specified below and therefore cannot follow a standard battery format but rather must be case-specific and sensitive to individual characteristics. Neuropsychological assessment in general should not be conducted with an overreliance on "testing" (Nell, 2000), and this is particularly true in a cross-cultural context, where norms are unavailable or insufficient. Thorough history-taking and observation of behavior, when informed by knowledge of brain-behavior relations, are the most powerful clinical tools and may be sufficient for arriving at diagnostic conclusions in a significant number of cases. The flexibility required in the selection of tests and procedures demands sufficient experience, knowledge, and caution on the part of the examiner. It may be noted that in the case example provided, there was considerable focus on history, qualitative observation, and discussion of pathognomonic signs, rather than norm-referenced interpretation.

Neuropsychological assessment as it has been developed and practiced in the Anglo-American tradition relies heavily on an actuarial approach that typically involves comparing the results of a battery of standardized tests to population-based norms. Although there is consensus that norm-referenced interpretations of neuropsychological assessments can go hand in hand with an approach of qualitative analysis (e.g., Ivnik, 1978; Kaplan, 1988; Luria & Majovski, 1977), a reliance on the actuarial approach predominates. Moreover, a reliance on test scores tends to be greatest when the severity of the brain impairment is mild to moderate in severity, rather than severe, or when neuropsychological deficits are thought to be secondary to a psychiatric disorder. Given the limitations of such an actuarial approach with torture victims, the importance of qualitative, nonpsychometric paradigms in the analysis of deficits cannot be overestimated. The general principles of cross-cultural neuropsychology are applicable and can be found in works by Nell (2000) and Fletcher-Janzen, Strickland, and Reynolds (2000).

Cultural and Linguistic Differences

Cultural and linguistic differences may significantly limit the utility and indications for neuropsychological assessments among suspected torture victims. Even under the best of circumstances (i.e., when using norm-referenced interpretation of tests within the same culture), significant difficulties have been discussed (e.g., Fastenau & Adams, 1996). Neuropsychological assessments may thus be of particularly questionable validity when standard trans-

lations of tests are not available and the clinical examiner is not fluent in the subject's language (Artiola i Fortuny & Mullaney, 1998). Moreover, even in the event that an examiner is fluent in the subject's language and has access to translations of tests and procedures, equivalence of what is being measured cannot necessarily be assumed (Nell, 2000). Unless standardized translations of tests are available and examiners are fluent in the subject's language, verbal tasks cannot be administered at all or cannot be interpreted in a meaningful way. This means that only nonverbal tests may be used and that comparisons between verbal and nonverbal faculties become all but impossible.

However, it must be noted that significant intergroup differences have been found empirically on nonverbal tasks (e.g., D. M. Jacobs et al., 1997). The use of nonverbal tasks does in no way allow norm-referenced interpretation across different cultural and linguistic groups, except in cases where a qualitative appraisal alone already demonstrates impairment (in which case reference to norms is not really necessary, even though it may be useful to illustrate the magnitude of impairment). Commonly, population-based norms are not available for the cultural and linguistic groups torture survivors come from. In addition, many torture victims from developing countries have little or no formal education and may bring an entirely different mindset and test-taking attitude to the clinical situation. In short, the question of construct validity (i.e., whether certain tests and procedures actually measure the same neurocognitive functions) is typically difficult to answer (Nell, 2000). As a result, neuropsychological impairment on testing that is anything less than severe or moderate may be difficult to interpret.

The use of interpreters in assessment is a particularly difficult challenge that cannot be avoided when linguistically and culturally competent neuropsychologists are not available to conduct assessments, which is frequently the case for survivors of torture from developing countries. Interpreters require additional training for such purposes and can be most helpful when they are part of the same cross-cultural treatment team as the neuropsychologist. Alternatively, Nell's (2000) model of "devolving the transferable technology" of neuropsychological assessment by making neuropsychological skills available to culturally competent psychologists or other professionals may be pursued when such professionals are available and can be trained.

Posttraumatic Stress Disorder

PTSD and Neuropsychological Impairment

There is great variability among the samples used for the study of neuropsychological measures in posttraumatic stress. This may account for the variability of the cognitive problems reported from these studies. Knight (1997) stated that "clinical observations suggest that PTSD symptoms show the most overlap with the neurocognitive domains of attention, memory and executive functioning" (p. 461). This is consistent with complaints heard frequently from survivors of torture. Survivors complain of difficulties in concentrating, in retaining information, and in engaging in planned, goal-directed activity.

Distinguishing PTSD From Other Disorders

Neuropsychological assessment methods appear able to identify the presence of neurocognitive deficits in PTSD, even though the

specificity of these deficits is more difficult to establish. Some studies have documented the presence of deficits in PTSD subjects when compared with normal controls but failed to discriminate these subjects from matched psychiatric controls (Dalton, Pederson, & Ryan, 1989; Gil et al., 1990). In other words, it is likely that neurocognitive deficits on test performances will be evident in cases of PTSD but insufficient for diagnosing PTSD. As in many other types of assessment, interpretation of test results must be integrated into a larger context of history, interview information, and personality assessment. In that sense, specific neuropsychological assessment methods can make a contribution to the documentation of PTSD in the same manner that they may do for other psychiatric disorders associated with known neurocognitive deficits.

Conclusion

Clinical neuropsychology has the potential to make a contribution to the assessment and documentation of the consequences of torture. The epidemic proportions of torture and the high incidence of TBI and PTSD among torture victims should be seen as an appeal to neuropsychologists to lend their expertise for the benefit of the victims and to strengthen efforts toward prevention. Despite significant limitations, neuropsychological assessment can be useful in evaluating torture victims for the purposes of clarifying diagnosis, providing detailed descriptions and explanations of behavioral problems, and guiding rehabilitation.

Neuropsychologists who are interested in providing services or who wish to obtain information about existing organizations and treatment centers may contact the authors directly or may log on to the following Web sites, which contain related links: www.irct.org, www.survivorsintl.org, and www.phrusa.org. Treatment centers are welcome to contact the authors for further information and training.

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Received January 28, 2000

Revision received April 30, 2001

Accepted May 14, 2001 ■

New Editors Appointed, 2003–2008

The Publications and Communications Board of the American Psychological Association announces the appointment of five new editors for 6-year terms beginning in 2003.

As of January 1, 2002, manuscripts should be directed as follows:

- For the *Journal of Applied Psychology*, submit manuscripts to **Sheldon Zedeck, PhD**, Department of Psychology, University of California, Berkeley, CA 94720-1650.
- For the *Journal of Educational Psychology*, submit manuscripts to **Karen R. Harris, EdD**, Department of Special Education, Benjamin Building, University of Maryland, College Park, MD 20742.
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Manuscript submission patterns make the precise date of completion of the 2002 volumes uncertain. Current editors, Kevin R. Murphy, PhD, Michael Pressley, PhD, Philip C. Kendall, PhD, Chester A. Insko, PhD, and Nancy Eisenberg, PhD, respectively, will receive and consider manuscripts through December 31, 2001. Should 2002 volumes be completed before that date, manuscripts will be redirected to the new editors for consideration in 2003 volumes.