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Abstract

This paper presents a review and critique of the Houston Conference on Specialty Education and Training in Clinical Neuropsychology, together with an informal summary of opinions of a number of neuropsychologists. Issues regarding the role of the Clinical Neuropsychology Synarchy (CNS) and the applicability of the conference policies are offered. Several deficiencies and limitations of the policy statement are discussed. An informal survey of neuropsychologists interested in the Houston Conference indicates rather different opinions concerning the training and education of neuropsychologists. It is our contention that the results of the Houston Conference can only be considered controversial at best and that there is still much diversity of opinion in the field regarding the proper training of neuropsychologists. We hope to stimulate further discussion and greater involvement of the profession before final criteria for education and training are developed and adopted.
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1. Introduction

On September 3–7, 1997, a conference (The Houston Conference, HC) was convened at the University of Houston with the purpose of establishing a model of training and education in clinical neuropsychology. According to the authors of the Houston Conference Policy

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Statement (HCPS; Hannay, Bieliauskas, Crosson, Hammeke, Hamsher, & Koffler, 1998), the aim of the HC was " . . . to advance an aspirational integrated model of specialty training in clinical neuropsychology" (p. 160). Clearly, such a goal is quite laudable and would have been welcomed by our profession. However, it appears that the HC represented an effort in which the end did not justify the means. It is questionable whether the product (which "several [HC] delegates likened . . . to childbirth" (p. 160)) is representative of the profession's goals or of its membership.

This article has been written at the suggestion of the Executive Board of the National Academy of Neuropsychology (NAN) in a letter to Ralph M. Reitan from Dr. Barbara Uzell, President of NAN, in June 2000. Her letter was in response to a memorandum to the Board from Dr. Reitan in which he asked the results from a survey he made, prior to the convening of the HC, be made available to the general membership of NAN and that the Board's endorsement of the HCPS be revoked. The Board asked that he submit a paper to the *Archives of Clinical Neuropsychology* for peer review and possible publication.

2. History of the Houston Conference

Linus Bielauskas, in a contribution to the Special Issue of the *Archives of Clinical Neuropsychology* (1998), provided a summary of the background for the HC. Bielauskas noted that the training guidelines adopted by the Division of Clinical Neuropsychology (Division 40) of American Psychological Association (APA) have been serving as the training model for clinical neuropsychology. The guidelines were formulated by a joint task force of the International Neuropsychological Society and Division 40 (Report of the INS–Division 40 Task Force on Education, Accreditation, and Credentialing, 1987). However, with the recognition of clinical neuropsychology by APA as a practice specialty, apparently a need was felt to revise the training guidelines in order to provide an integrated model of training for the specialty. A concern had been expressed regarding criteria for accreditation of internship and doctoral programs in clinical neuropsychology without adequate input from the profession (Koffler, 1996).

As a result, the Clinical Neuropsychology Synarchy (CNS)—which Dr. Bielauskas described as a small, informal group of representatives from certain national organizations in clinical neuropsychology—concluded that a conference should be held to address these concerns. Apparently, CNS was concerned about the "risk of considerable fractionation in the specialty with regard to education and training standards" (CNS, http://www.appcn.org/synarchy.html, 2001). CNS began initial planning in the latter part of 1996 and the HC was held in September 1997. Subsequent to the conference, all of the sponsoring organizations (with the apparent exception of APA) endorsed the HCPS. The policy statement and proceedings of the conference were the subject of a Special Issue of the *Archives of Clinical Neuropsychology* (1998). Although the HCPS was endorsed by the National Academy of Neuropsychology, NAN considers it to be a "working document in progress" (Prigatano, 2002).

The HCPS was predicated on the INS/Division 40 training model published in 1987, as is immediately obvious when the two documents are compared. Much of the HC policy statement is essentially a repackaging of the INS/Division 40 guidelines. For the past ten-plus years the

field was directed by these guidelines that, it must be noted, were never subjected to review, critique, or even discussion by the membership or the profession as a whole. A database of "training programs" was compiled, listing programs that supposedly were in compliance with these training guidelines. These programs became the sine qua non for training. However, there has never been any empirical attempt to judge the adequacy of these programs or of the original INS/Division 40 guidelines. The programs were never endorsed or even reviewed by APA, (despite the fact that APA has very specific standards for the accreditation of psychology training programs), and the proportion of the membership endorsing these programs has never been determined. One must wonder whether or not the INS/Division 40 guidelines represented the will of members of the profession or if they were only the decisions that came from its authors.

3. The role of the Clinical Neuropsychology Synarchy

It is noteworthy that the HC was conceived, organized, and planned by representatives of the CNS, which includes the American Academy of Clinical Neuropsychology (AACN), the American Board of Clinical Neuropsychology (ABCN), the Association for Doctoral Education in Clinical Neuropsychology (ADECN), the Association of Internship Training in Clinical Neuropsychology (AITCN), and the Association of Postdoctoral Programs in Clinical Neuropsychology (APPCN). Division 40 of APA and NAN were also represented. While the organizations comprising the CNS are described in the HCPS as "major national organizations," we would question the extent to which most practicing clinical neuropsychologists have any detailed knowledge of these organizations. Nevertheless, six representatives from these organizations formed the HC Planning Committee, organized the HC, and selected and invited the delegates.

The CNS did not include representation from one of the major boards of clinical practitioners (American Board of Professional Neuropsychology, [ABPN]). Indeed, within the HCPS, there is not a single reference to ABPN.

4. Selection of delegates

The HCPS stated that the announcement of the conference was made "in the *APA Monitor* and letters to members of the Division of Clinical Neuropsychology (Division 40), the NAN, and to directors of training programs at the doctoral, internship, and postdoctoral levels as listed in *The Clinical Neuropsychologist*" (Cripe, 1995, p. 60). In fact, as stated on p. 170[1], announcements were initially sent only to the training programs. There was a delay in the *APA Monitor* announcement " ... and it was not in the form or place that the Planning Committee had expected" (p. 170). The HCPS noted, "After some concerns were raised about insufficient circulation of the announcement" (p. 170), notices of the Conference were sent to all members of Division 40 and NAN.

[1] Page numbers, when not further documented, refer to the 1998 Special Issue of the *Archives of Clinical Neuropsychology*, *3*, 203–249.

The delegate selection process was ostensibly organized using a stratified sample (Hannay et al., 1998), and selection of delegates was based solely on the group decision of the six CNS representatives who constituted the Planning Committee for the HC.

5. Implications and effects of the planning committee's selection of delegates

Not counting the six Planning Committee members, 82% of the delegates came from institutions that received the initial mailing and applications for attendance. These were the institutions listed in *The Clinical Neuropsychologist* (1995) as having training programs. The additional notifications to members of NAN and Division 40 had little effect on selection of delegates. Only 18% of the delegates were not on the initial mailing list. Although many applications were received (177 in total), it is apparent that applicants stood relatively little chance of being approved by the Planning Committee if they were not on the initial mailing list.

It would appear that the basic decisions governing selection by the Planning Committee were already in place before most of the applications were received, since most of the applications came in after the initial mailing of applications to training programs, and presumably, as a result of the general announcement to members of Division 40 and NAN.

It should also be noted that all members of the Planning Committee, except the chairperson, are listed in the APA Directory as being certified by the American Board of Professional Psychology (ABPP) in Clinical Neuropsychology (CN). This ABPP–CN certification was also held by 70% of the delegates selected by the Planning Committee. Considering these circumstances, it is hardly surprising that the Policy Statement of the Houston Conference adopted an exit criterion of eligibility for board certification in clinical neuropsychology *by the ABPP*, and offered *no* recognition of board certification by the ABPN.

6. Summarical critique of the Houston Conference

The entire handling of the Houston Conference seemed to be designed to focus on the academic community and to exclude practitioners, the very people who knew, from their own practical experience, what should be included in the education and training of neuropsychologists.

This inference is supported by the following:

- The fact that 77% of the delegates and 86% of the Planning Committee were university faculty or held university appointments (as closely as we could determine).
- Although accepting funds to support the Conference from Division 40 and NAN, the Planning Committee initially sent a notice of the Conference only to training institutions as listed in *The Clinical Neuropsychologist* (1995), and 82% of the delegates eventually selected by the Planning Committee came from these institutions.
- Although ultimately prevailed upon to let the general membership of NAN and Division 40 know about the Conference, only 18% of the delegates selected by the Planning Committee were not affiliated with training institutions.

- It would seem to be important to gain the insights and recommendations of practitioners who represent the product of training efforts and who, on the basis of their own experience in adapting to the field, could offer advice about the type of education and training experiences they *should* have had. The Planning Committee decided to largely ignore this possible input in favor of perpetuating the values and practices of those persons already entrenched in training positions. This was a remarkable decision, considering that in Reitan's survey, 80% of the respondents said that they had gained their abilities to function as neuropsychologists through experience and on their own initiative in seeking necessary additional training; only 29% of the respondents felt that graduate school, internship, and/or residency had taught them the skills necessary to practice as a neuropsychologist. The value of CE courses was cited by 86% of these respondents.
- A suggestion was made to the Planning Committee that an organized mechanism (survey) be developed to permit input to the Houston Conference from people who were not able to attend (and especially from those 135 people whose applications were rejected by the Planning Committee). Not only was this suggestion not adopted—it was not even acknowledged. Any interest the Planning Committee might have had in broader input, it would seem, was outweighed by the preplanning of the agenda and format of the HC. It is difficult to avoid concluding that the Planning Committee was not prepared to accept any diversions from this agenda, such as those from practicing clinicians.
- Reitan requested time at the Houston Conference to review the recommendations and suggestions based on responses to his questionnaire. Dr. Hannay replied that this would not be permitted, apparently because the organization, agenda, and time allotments of the Conference had already been developed and structured by the Planning Committee

Many additional points of criticism of the HC could be cited and discussed at length. Briefly, among these, was the fact that the HC failed to address the important issue of undergraduate education, and the issue of graduate training received not much more than a listing of recommended courses and a number of general areas in which competence should have been achieved. A substantial degree of consistency in both undergraduate and graduate training is implied by a presumption that our field is sufficiently cohesive and identified by a common content, methodology, and practice to merit identification as a specialty. We can hardly deserve such recognition without specifying a common core of all areas of higher-level training that prepare a person for entry into the field. As things stand at present, the wide diversity among programs of undergraduate and graduate training, in effect, lay the groundwork and sow the seeds for extremely different approaches to the field. In turn, there seems little doubt that many of the controversies among neuropsychologists stem from the wide differences in preparatory training and education. The field urgently needs consistency, cohesiveness, and compatibility, beginning with common standards and, at least to a degree, common content continuing through undergraduate, graduate, and postgraduate training and education. The HCPS does little to advance a solution to these basic problems.

Another major shortcoming of the HCPS was the failure to address alternative training models such as those based on the "scholar-practitioner" model or "professional school" models. Such omissions and others tend to identify the HCPS as being out of touch with the

reality of the evolution of practice in neuropsychology. This criterion could be documented in detail, considering the host of ways in which the field is changing.

The HC did not address the issue of the relationships of neuropsychology to state licensing boards. If state licensure of clinical neuropsychologists progresses toward a general reality, the minimum standards for identification and practice as a neuropsychologist may evolve in a way that indeed renders the HCPS less relevant than the specific requirements of each individual state.

The outcome of the above considerations is that *we still need a conference* to address the issues and concerns that relate to the practice of clinical neuropsychology. The Planning Committee independently decided the aims, direction, and scope of the Houston Conference. We believe that the members of the profession should have been consulted. As noted, Dr. Hannay would not even permit the important aspects of the Reitan survey to be presented to the Conference, even though the Reitan survey represented the opinions and suggestions of more than twice as many neuropsychologists as the number who attended the Conference.

7. Definition of a neuropsychologist

The HCPS includes a general definition of a clinical neuropsychologist. It is important to recognize, however, that this brief (two-sentence) definition has little relevance for the practicing clinician. The entire document, in fact, determines and states the definition of a clinical neuropsychologist through the identification of conditions and requirements for functioning in this role. There are two major organizations that, in years past, have been engaged in examining and evaluating applicants for certification as clinical neuropsychologists—the American Board of Clinical Neuropsychology of the American Board of Professional Psychology (ABCN/ABPP) and the ABPN. The HCPS requires a 2-year residency, and endorses the ABCN/ABPP by identifying eligibility for board certification of ABCN/ABPP as an exit requirement.

The definition (Definition of a Clinical Neuropsychologist (1989)) published in 1989 (in *The Clinical Neuropsychologist*) also includes the statement that "Attainment of the ABCN/ABPP Diploma in Clinical Neuropsychology is the clearest evidence of competence as a Clinical Neuropsychologist . . . " Where does this leave the clinical neuropsychologists who are board certified by ABPN, as well as the great majority of neuropsychologists—those who have not sought or received certification by either board? State licensing, at least in many instances, will still permit such persons to practice, but perhaps at the disadvantage of not being able to identify themselves as clinical neuropsychologists (at least according to the HCPS).

In addition, the section of the Policy Statement concerned with Application of the Model states that neuropsychologists currently practicing prior to the implementation of the HCPS will be "governed by existing standards as to the appropriateness of identifying themselves as clinical neuropsychologists" (Hannay et al., 1998, p. 165). These "existing standards" apparently refer to the definition published in *The Clinical Neuropsychologist* in 1989 which includes university training, two or more years of supervised clinical training, appropriate licensing, and "review by one's peers as a test of these competencies." This appears to mean, by inference, that all persons in the field who have not had a 2-year supervised fellowship and

who are not endorsed by ABCN/ABPP should not deign to call themselves clinical neuropsychologists. The HCPS also notes that the document is not to be applied to individuals currently trained or in training in the specialty of clinical neuropsychology. It clearly is necessary to read between the lines of the Policy Statement to appreciate the full implications of the statements made. Are neuropsychologists who are in training or who meet the HCPS standards exempt? Are those who meet the 1989 definition exempt? What does "currently trained" or "in training" mean? Such considerations affect a majority of practicing neuropsychologists, inasmuch as a majority probably do not meet the criteria included in the "existing standards."

8. Content of the Houston Conference policy statement

Many reactions might be expected to the content of the HCPS, depending on the orientation, training, background, and area of neuropsychology represented by the individual neuropsychologist. Thus, the comments below should not be considered to be either comprehensive or exhaustive. As indicated above, the aims of the HC did not even include many of the concerns of a sample of neuropsychologists.

In the section of the HCPS identified as *Knowledge Base*, generic psychology core and generic clinic core areas are presented. The HCPS states that the 10 areas listed should be completed during doctoral education, and the six areas listed under *Foundations for the Study of Brain–Behavior Relationships* should be developed to a considerable degree at this level of training.

A mere listing of areas in which a clinical neuropsychologist should have knowledge does essentially nothing to assure that training given across institutions or the training received by individual neuropsychologists have any specified degree of comparability. In fact, the HCPS explicitly gives a great degree of latitude in this respect, stating that " ... variability may occur between doctoral programs in the degree to which foundations of brain-behavior relationships and clinical neuropsychology practice are emphasized." Such a listing essentially gives no common guidelines to follow in the education and training of clinical neuropsychologists, leaving anything more than a bare mention of some areas entirely to the discretion of those who implement each individual program. The degree of commonality of content in training is left essentially open, depending upon the decision made in each program. Considering the variability in training, background, orientation, and standards that we all know exist among and between faculties of doctoral programs and training facilities, the lack of more explicit guidance than is provided in the HCPS will probably do nothing to limit the seeds of dissension in methodology and orientation that are currently planted in the training process as it now stands. We need a specified common content core in doctoral training programs for clinical neuropsychologists.

The fact that the great majority of the delegates to the HC held university faculty positions may have been a factor in producing the limited incursions of the HCPS into the content area of academic instruction. Traditionally, university faculty jealously guard their right to teach what they decide to teach, citing the concept of academic freedom. However, when the aim is to train professionals who practice in a particular area (clinical neuropsychology) under an identified designation (clinical neuropsychologist), there should be specific and detailed areas

of knowledge and clinical methodologies that are common to them all. For example, since neuropsychological testing and assessment are integral aspects to the professional activities of neuropsychologists, what tests and methods should be taught? What standards of competence should be met by each student? How should these standards be identified and criteria for competence determined? If standards and competence criteria are not fully defined in all areas, at least some common goals of education and training should be stated if we plan to provide a common base of core-knowledge as a foundation for the unique identification and characterization of our profession.

The HCPS states, "The postdoctoral residency program is a required component in specialty education in clinical neuropsychology" (p. 164). Residency programs must provide a number of "assurances" in order to obtain accreditation. Entry into a residency program will require completion of an APA or CPA accredited internship program "which includes some training in clinical neuropsychology." A number of exit criteria are also identified, but no specific standards for evaluation are given. These include qualifications such as "eligibility for board certification in clinical neuropsychology by the American Board of Professional Neuropsychology." As noted above, no mention is made of the legitimacy or value of board eligibility of the ABPN.

The HCPS identifies the value of continuing education as relating only to "updating previously acquired knowledge or skills or by acquiring new knowledge or skills" by clinical neuropsychologists who have already completed their training and established their competence. This evaluation, quite obviously, presumes that *every* clinical neuropsychologist, approved by the HCPS standards, was fully and adequately educated and trained, and needs nothing further than "updating" or knowledge of new developments. Considering the diversity in neuropsychological education, training, and practice, this emphasis on the need only for updating or "new knowledge" is impractical. It is based on the presumption that current standards, as proposed by the HCPS, produce neuropsychologists who know, upon completion of their training, everything of relevance available from the past that they need to know. By explicitly stating that "Continuing education is not a method for acquiring core knowledge or skills to practice clinical neuropsychology or identify oneself as a clinical neuropsychologist," the authors of the HCPS have explicitly deleted, as appropriate in continuing education, any area or methodology with which the "certified" neuropsychologist did not happen to be familiar prior to being declared a clinical neuropsychologist according to HCPS criteria. When education and training are as diversified as is currently the case, the presumptions implicit in this section of the HCPS are naive. Clinical neuropsychology is a broad field, and core training in additional selected areas may become of critical importance to neuropsychologists as their professional activities expand.

9. A survey of neuropsychologists prior to the Houston Conference

Feeling that it was important to have general input from the profession before detailed planning of a conference, and before the Houston Conference was convened, Reitan requested that the Planning Committee develop a mechanism (perhaps a survey) to provide a broad input to those attending the Conference regarding the opinions and advice of clinical

neuropsychologists who were not able to attend (and especially from those neuropsychologists whose applications were rejected by the Planning Committee). Because the Planning Committee did not take any steps to learn the opinions of neuropsychologists more generally, one of us (Reitan) decided to obtain such information, preliminary though it might be, even though time was very limited before the Conference was scheduled to convene.

A questionnaire was sent to 158 neuropsychologists, and 92 replies were summarized. Because of the absence of outside funding and time constraints, it was not possible to carry out as broad a mailing as would have been desirable, nor to follow procedures that would have ensured that the sampling was random. In order to assemble names and addresses of possible respondents, questionnaires were mailed principally to persons in Reitan's correspondence file. Obviously, this source may not have constituted a representative sample of neuropsychologists generally, and it is possible that many members of this sample may not have agreed with the way that the HC was planned or carried out. There was no attempt, however, to select individuals personally in accordance with either support of or opposition to the Houston Conference. The analysis was based on 92 questionnaires that were returned by the stipulated date. An *N* of 92 was more than double the 40 delegates to the Houston Conference, and exactly twice the total number of delegates, including the six members of the Planning Committee. Thus, in terms of numbers alone, it would seem that these respondents should have been heard.

10. Characteristics of the 92 respondents

The respondents were asked to rank-order categories that best described their professional activities. Sixty-one respondents (66%) listed themselves as general practitioners. Other categories that received rankings as the principal activity were as follows: Rehabilitation Neuropsychologists (12%), Forensic Neuropsychologists (11%), and Educators (9%). It is obvious that this group of respondents differed sharply from the attendees of the Houston Conference, inasmuch as 77% of the delegates and 86% of the Planning Committee were university faculty or held university appointments (judging from listings in the APA Directory).

11. Indications of interest in the Houston Conference

The following indications of interest were endorsed: Applied for attendance, 25%; Accepted for attendance, 4%; Rejected for attendance, 12% (some applicants had not received replies); Interested but not able to attend, 40%; Not able to attend but would like to have some input to the Conference, even if only through this questionnaire, 80%; Little interest in the Houston Conference or its outcome, 0%.

It is apparent that the respondents were interested in the Houston Conference and wanted their voices to be heard.

Annotated Summary of Respondent Opinions

1. This item asked for opinions regarding the appropriate background training of psychologists who wish to enter the field of clinical neuropsychology. A majority of respondents felt that clinical psychology was an important area for neuropsychologists, but more

than 50% felt that the neurosciences also represented an appropriate entry avenue and that a number of different areas, over and beyond clinical psychology, were quite appropriate. The results indicated that diversity, in terms of background, was supported.

2. A question was asked regarding training, in consideration that neuropsychology has been recognized as a specialty area. Twenty-one percent of the respondents felt that clinical neuropsychology should have its own unique doctoral program, whereas 75% felt that training programs in neuropsychology could be provided by other areas for much of the doctoral program.
3. The respondents were asked, based on their experience in the practice of neuropsychology, about the education and training of specific professional skills that prepared them to function independently as neuropsychologists. These results indicated that additional training and experience, together with continuing education courses, had more to do with preparation to function independently as a clinical neuropsychologist than did graduate school alone, or even graduate school with internship and residency training. Ranking of areas that were *most* relevant, however, elevated graduate school plus internship plus postdoctoral training almost to the level of additional training, learning, and experience. Although the focus of the Houston Conference was on education and training, the respondents indicated that additional training and experience, that went *beyond* supervised or formal training, plus continuing education courses were of great significance in their preparation. The great majority of respondents (80%) indicated that *most* of the necessary specific skills and abilities were gained through experience and through the respondent's own initiative in seeking additional training. These responses strongly suggest that graduate school and formal training *have had a rather limited role in providing the skills and abilities needed to function independently as a neuropsychologist*, and that many beginning neuropsychologists have found it necessary to learn the profession mainly through experience and additional training.
4. The respondents were asked whether they agree, disagree, or are not sure of their feelings toward the position of the Division of Clinical Neuropsychology (Division 40), published in 1989, that states that "attainment of the ABCN/ABPP Diploma in Clinical Neuropsychology is the clearest evidence of competence as a Clinical Neuropsychologist." The great majority (82%) said that they did not agree with this statement.
5. One of the stated aims of the HC was to integrate training at various levels. The majority of respondents (63%) felt that there was so much diversity among training programs at each level that a much deeper analysis of content of training was necessary prior to holding a conference on education and training. Fifty-eight percent felt that as a profession we need to agree on a common core of courses for graduate school and a basic battery of validated tests which trainees should be taught to use before we can even begin to decide when and how training can be integrated at various levels.
6. Based upon the respondents' own experience and the way their professional activities have evolved, they were asked to identify any of the 16 given areas that were relevant for consideration in a conference on education and training, and then rank the four most important areas. More than 60% of the respondents believed that training in each of the 16 areas was important in preparing for eventual professional activities. The five areas receiving endorsement by 90% or more of the respondents as being

most important in preparing for eventual professional activities were as follows: assessment and neuropsychological testing, 96%; knowledge of brain disease and damage, 95%; valid differentiation of brain disease and emotional disorders, 93%; clinical signs and symptoms of neurological diseases, 90%; neuroanatomy, 90%. With respect to the area judged to be most important among all of the 16 areas, assessment and neuropsychological testing was selected by 47% of the respondents, followed by knowledge of brain disease and damage, 21%; neuroanatomy, 14%; and brain pathology that characterizes various types of brain damage and disease, 7%. Results of this kind, particularly if based upon a larger and representative sample, would provide important clues to areas that should be emphasized in education and training. The Planning Committee for the HC, however, did not respond to a suggestion that they seek such input.

7. While recognizing that testing is only a part of neuropsychology, the next question inquired about the tests and procedures the respondents felt to be important in thorough training for the evaluation of individual clinical clients. The tests or procedures named in the questionnaire were the Luria-Nebraska, the Halstead-Reitan Battery, the Boston Process Approach, Flexible Batteries, the Wechsler Memory Scale, the Minnesota Multiphasic Personality Inventory (MMPI), and Other Personality Tests. The respondents were also asked whether the training should be given in graduate school, internship, or postdoctoral training. The respondents felt that training in these particular procedures should begin principally in graduate school, with the number of endorsements dropping quite consistently from graduate school to internship, and from internship to postdoctoral training. Thus, the general feeling was that the area of assessment and neuropsychological testing, which was judged to be of the greatest importance in the previous item, should be intensively studied rather early in training. The seven areas of assessment were also judged with respect to rank-ordering of their importance in neuropsychological education and training. Judged to be most important among those responding were: Halstead-Reitan Battery, 83%; Flexible Batteries, 4%; and Wechsler Memory Scale, 2%. Additional procedures received 1% or less. (We must remind the reader that this data was produced by respondents derived from Reitan's correspondence files.)
8. The next item listed the seven aims that were identified by the Planning Committee as representing the content of the Houston Conference, followed by 10 additional aims that might be considered to be of importance in education and training. The five aims judged by the respondents to be most important for a conference on education and training in clinical neuropsychology, listed in order, were as follows:
   - What knowledge and skills are needed in clinical neuropsychology?
   - The basic fundamental factor in neuropsychology concerns relating brain and behavior. What can be done to ensure that students are trained, at all levels, in methods that establish these relationships validly (as opposed to intuitively)?
   - How can mechanisms be developed to provide training for practicing neuropsychologists who need to supplement their prior training?
   - What can be done to make training programs, at all levels, more responsive to the needs and abilities that trainees will require in their eventual practice?

- How do graduate school programs need to be changed to meet the practice-needs of eventual clinical neuropsychologists?

9. The five aims judged to be least important were as follows, beginning with the least important:
   - How should the outcome of the Houston Conference be implemented?
   - What entry standards are needed at each level (graduate, internship, residency)?
   - What training should be done at the residency level?
   - How does residency (postdoctoral) training need to be changed?
   - Is it possible to orient education and training of neuropsychologists to a single model or plan (one training fits all), or is neuropsychology going to have to move in the direction of specialization in training?

   Among the 17 aims that were listed in the questionnaire, all 17 were listed as having some importance in more than 80% of the responses. However, none of the seven topics listed by the Planning Committee of the Houston Conference were included among the six aims judged to be most important with respect to a conference on education and training. The median ranking of the seven aims proposed by the Planning Committee was 12 out of the 17 aims listed, with the most important of the Planning Committee's aim ranking number 7 and the least important ranking number 17. These results indicate that the aims thought by the respondents to be most important for a conference on education and training were not even included in the aims stated by the Planning Committee. Should the aims of the Planning Committee have served as the bases for this conference, or should they have asked practicing neuropsychologists for their input? The aims of the Houston Conference, as stated by the Chairperson, Dr. H. Julia Hannay, were as follows:
   - What training should be done at the graduate level?
   - What training should be done at the internship level?
   - What training should be done at the residency level?
   - What entry standards are needed at each level?
   - What is the role of specific proficiencies in clinical neuropsychology?
   - What is the role of continuing education in clinical neuropsychology?
   - How should the outcome of the Conference be implemented?

   These were the issues actually considered at the Conference. It is interesting to note the limited emphasis on content of training among these stated aims. It seems very apparent that the Planning Committee could have benefitted from the input of practicing neuropsychologists. Note that the aims endorsed by practicing neuropsychologists emphasized the relationship between education and training, at all levels, *to the actual practice of clinical neuropsychology*. The Houston Conference, and its ensuing Policy Statement, essentially ignored this important issue.

   The remaining five items in the questionnaire covered procedural considerations in implementation of the HC.

10. One percent of the respondents agreed with the way the Planning Committee acted; 9% indicated that they disagreed with certain aspects of the way the situation was handled; and 85% indicated that they thought it was a gross mistake to not provide for organized input from the profession.

11. Five percent indicated that they approved of the Planning Committee's selection process, and 76% of respondents indicated that they did not approve.
12. In consideration that there might be a possible conflict of interest, inasmuch as members of the Planning Committee coincided with members of the Division 40 Executive Board and, obviously that meant that the Division 40 Executive Board would be granting monies to themselves, 11% of the respondents approved of the grant by the Division 40 Executive Board, and 79% did not approve.
13. In considering the overall procedures followed in developing the Houston Conference, 1% of the respondents felt that the overall procedures were handled properly; 22% disagreed with certain aspects of the way in which it was handled; and 72% responded that handling of the situation was grossly improper.
14. The final item of the questionnaire asked the respondents to indicate whether they felt that the Houston Conference was likely to produce conclusions that fairly represent clinical neuropsychology. Four percent of the respondents felt that the conclusions of the Houston Conference would fairly represent clinical neuropsychology, whereas 82% responded negatively.

A substantial number of the respondents included their own final comments, the great majority of which were negative toward the Houston Conference. The entire questionnaire, together with a sampling of the voluntary and signed comments, is available from the first author of this paper.

12. Survey conducted by the National Academy of Neuropsychology

We wish to note that in March 1998 the NAN conducted a survey of the NAN membership. Only 173 responses were received from more than 2000 mailings. This low response may have reflected the fact that the HCPS had not yet been published except in the Division 40 Newsletter and on the NAN website, and many members of NAN may have had little familiarity with its contents. The responses indicated that 62% of the respondents endorsed the HCPS and 38% did not or were unsure. Concerns expressed included many of the same objections made by respondents in our survey as noted above. Nevertheless, apparently on the basis of this split vote, a response rate indicating that only 107 NAN members endorsed the HCPS (less than 6% of the mailings), the NAN Executive Committee endorsed the document.

13. Final comments

As scientists, we are trained to be critical analysts. We would be remiss if we failed to apply our scientific training to the current situation. Any attempt to block or limit our right to critique a policy should be viewed as highly questionable, if not totally unacceptable. The future of our profession should not depend on the decisions of a few.

We feel that there is a very disturbing trend developing in the profession of clinical neuropsychology. This trend can be best described as a move towards an oligarchical type of governance. Important policies are being formulated and promulgated often by a self-selected

few. Little or no open formal discussion or membership votes on important issues is ever held. Policies become de facto standards by virtue of their existence. The Houston Conference and its policy statement is an example of this process of governance by a few. The Planning Committee presumed that it reflects the consensus of the profession without ever demonstrating evidence of such consensus. The input and guidance of the profession was relatively neglected.

The HC training model is predicated on a preexisting model for training developed by an INS/Division 40 task force. The validity of the INS/Division 40 guidelines has never been established. Yet, there appears to be an expectation that the profession should uncritically accept the validity of the newly formulated Houston Conference model. In fact, we understand that the Planning Committee actually required a promise that no dissenting opinions would be published in the *Archives of Clinical Neuropsychology* for a minimum of 2 years following publication of the HCPS! Conditions for publication of the Special Issue, imposed by the Planning Committee, included not only omission of peer review, but an agreement that no editorial review or changes of any kind would be made. These requirements certainly suggest that the Planning Committee wished to diminish any chance that open discussion would occur which might possibly detract from endorsement of the HCPS by the sponsoring organizations. In fact, the Special Issue included the statement that " . . . when that [endorsement] was accomplished the profession would be in a stronger position to gain endorsement from additional groups." One might ask if this was a preconceived and engineered plan to build one endorsement on another and thereby lock in the HCPS, deliberately by-passing any input from the profession.

While the HCPS is deemed "aspirational," one must question whose aspirations are being advanced. We recognize and appreciate that many delegates to the HC approached the Conference with noble intentions and considerable devotion, selflessness, and idealism. Nevertheless, the policy statement resulting from the HC must be viewed as controversial, and the views expressed therein, when fully discussed and evaluated, as possibly representing a minority opinion and not necessarily representative of the population of neuropsychologists in the United States and Canada. There is also a danger that readers of the NAN and APA outlets which published the HCPS may erroneously assume that the findings are officially sanctioned by those organizations and firmly established in the profession, particularly since opposing views have not been systematically expressed.

It is important that training issues be widely discussed and debated within the field of neuropsychology with the voices of all neuropsychologists being heard. Improvements in neuropsychology training could and should be implemented. However, such improvements must foster, rather than stifle, the true strength of neuropsychology and recognize and value the diverse backgrounds from which we have come. Rather than fostering diversity, the HC promotes a singularity of training that may well produce more clones than innovators. Improvements in neuropsychological training should also be made with considerable forethought and full input from the profession, as contrasted with essentially a 3-day conference based on an agenda created by six people. The conference should be based on issues that the profession in general feels should be addressed, and entirely free of possibly biased views of selected persons.

The authors of this paper wish to emphasize that we cannot claim to represent our profession as a whole; we represent only those neuropsychologists who have offered their opinions as reflected in this paper. We do not presume to represent any who may have similar opinions not

expressed to us; those who have opinions in stark opposition to us; those who have no opinions; nor those who want more information before feeling able to have any opinion. But we do feel very strongly that every neuropsychologist should have the opportunity to be heard. We are very much concerned that neuropsychologists become fully aware of "guidelines" or position papers being advocated from our professional organizations that are shielded from critical evaluation and, in fact, become de facto statements of the standard of practice. Neuropsychologists need to make their opinions known to those who represent them.

Recently, a President of NAN attempted to convene a "Blue Ribbon Panel" to meet at the 2001 NAN meeting in order to reconsider the HCPS and the various issues raised since its publication. However, this attempt failed, in that a number of invitees declined the invitation, indicated that revisiting the conference was unnecessary, inappropriate, and regressive. Their firm, and apparently irreversible, opinion was that the Houston Conference was a finished product, that they had accomplished what they had set out to do, and that the only remaining issue was how to best implement its guidelines. It seems clear that at least some supporters of the HC consider it "a done deal."

Finally, and very importantly, the HC has never been reviewed or endorsed by the governance of the APA. Yet, the HCPS is proposed as the model for future training in clinical neuropsychology. Predictably, steps have been taken to implement the HCPS, inasmuch as there is now an association of postdoctoral training programs that claim to meet these training requirements. Further, job listings have often appeared that use HC training criteria as requirements of applicants for positions.

In her charge to the delegates of the Houston Conference, Dr. Hannay, Chair of the Planning Committee, stated: "We have an opportunity ... to produce a document which will not only guide us through the next decade as the INS/Division 40 Guidelines have so admirably done, but will outline our aspirations for the future" (Hannay et al., 1998, p. 177). It is apparent that the Policy Statement resulting from the Conference was intended to be a document of major significance for the future of neuropsychology. The above critique highlights the disparity between the actual outcome of the Conference and the aims and aspirations attributed to it by Dr. Hannay. It seems remarkable that a few members of our profession would produce a document intended to "guide us through the next decade" and to "outline our aspirations for the future," without broader input from the profession.

There is no doubt that education and training represent fundamental issues in the development of clinical neuropsychology. Obviously, we need the best thinking of *all* of the members of our profession, even though maturation and coalescence of our diversified values and ideas may take time. We need careful, detailed planning by representatives from all areas of clinical neuropsychology, with input from the profession as a whole. On the basis of such thorough and diversified efforts we can begin to lay the groundwork (if our field is yet mature enough to do so) for a meaningful conference on education and planning.

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