A view from the chair

On becoming a professional organization

by Christine Fischetti, Ph.D.

I would like to take this opportunity to call your attention to the current trend in this organization and to some of the people who are making it happen. This may sound like a stock prospec-tus, but it is true: GPPA is experienc-ing a period of unprecendented growth and expansion. From a small organization with largely social aims and activities, we have grown into a vital and effective network of almost 300 professionals of varied interests,

pursuing professional, educational and also social aims.

This growth has been occuring quietly over a period of years, but is now much more visible due to the work of many dedicated people. Mark Twain said, "Work consists in whatever a body is obliged to do...Play consists of whatever a body is not obliged to do." Let me remind you that no one working for GPPA is either paid or ob-liged. The work whose fruits you see in the GPPA REPORT, Educational programs, the "Ask a Psychologist" column, Bi-annual meetings, Phone line answering, the Speakers' Bureau and Carnegie Library project, as well

as the less visible work carried out by the Ethics Committee, is all carried out by people who generously volunteer their time to the organization.

News of the latest work comes to members in the form of the GPPA REPORT. The members of this com-mittee are too busy getting out copy to blow their own horns. If I had them on stage, I'd ask them to take a bow. GPPA REPORT is a forum and con-duit for information exchange among members and also between the Board and the general membership. Consid-erable amounts of time and work are lavished on this "baby" by its "parents". My predecessor Andrea Velletri, the Newsletter and Publications chair Val Brown, and the original and current members of the committee can be jus-tifiably proud. Lest anyone think that this bunch would rest on their laurels, I will detail below some of the coming attractions.

Time and space limit me in comment-ing on all ongoing projects and ac-tivities but consider those who coordi-nate such activities as: the Carnegie Library Project – Dale Morter, who hunts up a psyshologist to be there to meet the public every week; Judy Grumet, who processes and presents membership applications; Bob Hickey, who corrals psychologists to write newspaper columns and eats and sleeps press deadlines; Andrea Velletri, who keeps continuing educa-tion programs coming year after year; Ruth Beach, who along with members of the Professional Psychology Com-mittee produces Third Thursdays; Rita Pellow, who contacts legislators and monitors legislation; Pearl Brostoff, who is investing considerable time and energy into assembling and main-taining the new referral list; Art Van Cara, who rides herd on the burgeon-

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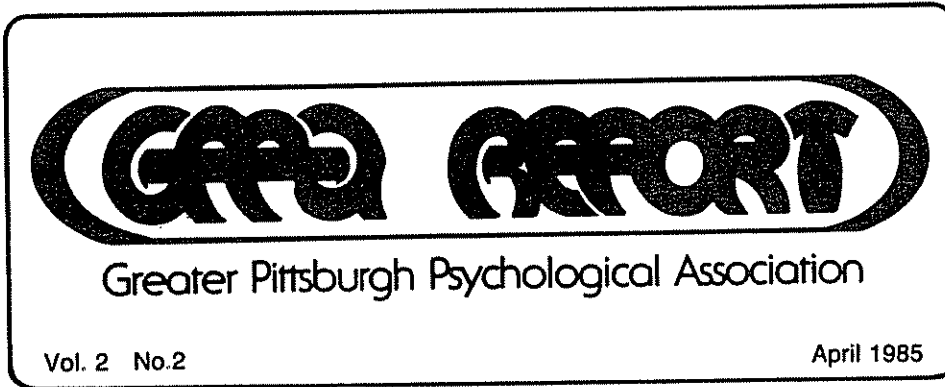
Random access

Cognitive science and clinical practice - David Klahr, Ph.D.

The Department of Psychology at CMU has no program in clinical psychology (or educational psychology, or counseling psychology, or any related area) at the graduate level. Nor does it have any physiological or neuroscience prog-rams. At this point, many of the readers of this newsletter may sense an urge to flip to the "Job Market" column, or the crossword puzzle, but I urge you to bear with me, for I will argue that even without a clinical faculty, CMU's research is of great potential relevance for clinical theory, and ultimately for clinical practice.

What we do have at CMU is a preeminent research program in a new area called "cognitive science", a synthesis of cognitive psychology, linguistics, and artificial intelligence. This is a very broad field, but at CMU there is a fairly coherent focus on human cognition. The goal is no less ambitious than to chart the system architecture of the mind. The general method is to observe human performance in a variety of contexts -- ranging from relatively sparse contexts (such as dis-criminating words from non-words) to very complex (learning to program a com-puter, or to write a piece of expository text). Even in the simplest of the contexts just described, the underlying cognitive processes that produce the subject's responses are very complicated, and detailed theories are usually stated in some formal language such as mathematics or a computer-like set of symbolic state-ments. Note that this does not mean that human thinking is supposed to be as simple or straight-forward as computer processes. On the contrary, it is so com-plex and subtle, that to attempt to describe a theory without such formalisms would be hopelessly ambiguous (and probably internally inconsistent). (Imagine the difficulty of attempting to describe DNA, or photosynthesis without non-verbal formalisms such as diagrams or mathematics.)

In addition to the cognitive science group at CMU (which includes both Cognitive and Developmental psychologists) we have a group of Social Psychologists working in traditional areas as well as in the emerging field of Behavioral Medicine

Recent work includes studies of mood and emotion, relationships, stress and social support, and self-awareness and anxiety. The links between CMU research in Social Psychology and clincial issues are fairly straightfoward, and I will not dwell on them.

But what about cognitive science? How can this kind of work impact on mental health theory and practice? At the most general level, the answer is obvious: the more we understand about normal functioning, the better we can understand anomalies and disorders. But such a reply is unsatisfyingly remote, and we can do better. Let me list a few of the specific research areas at CMU that seem to be directly relevant to different aspects of clinical practice.

▪ Investigations of how people acquire complex skills, and how they make transitions from novice to expert performance have revealed the complexity of the data structures and processing rules that must be learned even for apparently "simple" tasks such as learning to add or to memorize long lists of digits. Such research is clearly relevant to the "rule learning" aspects of cognitive-behavior therapy. Recent work suggests that traditional learning theory is inadequate to account for the acquisition of complex rule systems, and yet most of the procedures in cognitive therapies are based on a learning theory that can not even account for how children learn to do arithmetic, let alone how adults learn to control their own behavior in complex social and emotional settings.

▪ Studies of memory organization are relevant to any therapies that rely on people's recall of prior events. Recent research has begun to reveal in great detail how complex events, scripts, schemas, etc., are stored, modified, and retrieved. In fact, CMU researchers recently published an entire book on the methodology involved in the analysis of verbal protocols. The primary question addressed was the following: "When can we interpret the protocol as a true indication of mental processes, and when is it likely to be a highly distorted report of the subject's own theory about what he or she *should* have been thinking about?"

▪ Other studies deal with precise measurements of the way that activation of one component of memory might evoke stimulation of other components, depending on their degree of relatedness. Ironically, the clinical community, even though dealing with contexts much more complicated than those used by current cognitive researchers, appears to be largely unaware of progress in the area. Instead it still uses metaphors and theories about memory organization that are, at best, based on the insightful and fertile speculations of Freud, and at worst, on the simple lab experiments of a quarter-century ago.

▪ Another line of memory-related work addresses the question of how people detect and exploit the similarity between one problem-solving situation and another. It seems that the results of this kind of research may bear directly on the question of how, why and with what effect people interpret one life situation as similar to another, and consequently evoke either appropriate or inappropriate coping strategies.

▪ My final example of relevant cognitive research has pragmatic implications: it is work on the cognitive processes involved in comprehending written materials. Some of this work is very basic, and involves detailed studies of how the eyes scan a page as a function of the content and organization of the text, as well as the prior knowledge and goals of the reader. Other work in the area is more applied, and addresses the question of how to use what is known about the capacities and organization of our cognitive processes in constructing more understandable forms of technical and legal documents. Given the deleterious effects of incomprehensible insurance forms on the mental health of practictioner and client alike, this is one area where the potential implications of the research are clear.

You can find out more about this kind of research by perusing some of the many recent textbooks with "cognitive psychology" in their title, or any of the series of volumes published from the Carnegie Cognition Symposia, or by looking at the journals in which this kind of research is reported: *Cognitive Psychology, Cognitive Science, Cognition, Cognition and Instruction, Journal of Memory and Language, Memory and Cognition.* Interestingly, none these is published by the APA.

David Klahr, Ph D is the head of the Department of Psychology, Carnegie-Mellon University