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# The Fragmentation of Psychology?

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*Rather than being viewed as disintegration, the apparent fragmentation of psychology is interpreted positively as an inevitable consequence of increasing specialization of knowledge as our science matures and our range of applications expands. The field's specialization creates the familiar tensions regarding requirements of training and professional certification, but these issues are best resolved by pragmatic marketplace forces alongside persuasive arguments. Despite specialization, national umbrella organizations, such as the American Psychological Association, the American Psychological Society, and the Federation of Behavioral, Psychological, and Cognitive Sciences, provide necessary services for all behavioral scientists. These services include social bonding around mutual interests to promote scientific information exchange and to focus advocacy of our positions in national forums.*

The topic of this article—the fragmentation of psychology—is one of those perennial chestnuts to which there is no agreed-upon answer at present, nor is one likely in the near future. Probably William James and Titchener argued about this at the first meeting of the American Psychological Association (APA) 100 years ago. The basic difficulty is that psychology itself is an ill-defined field; few of us could agree on what is the proper purview of the discipline of psychology. Similarly, the unity or fragmentation of any intellectual discipline can be assessed from many different perspectives, such as agreement among its devotees regarding the legitimate problems to be investigated or agreement in their philosophical orientation, fundamental concepts, or methods of investigation.

A simple resolution might be to define the field of psychology in operational terms, as simply the collection of professional activities that people who call themselves psychologists engage in. And if we discover that psychologists engage in many different types of activities, then we can conclude that there are many different types of psychologists or fragments of the field.

Now there is no question that people who call themselves psychologists are working in large numbers of vastly different settings doing vastly different things. Some of us are university teachers, laboratory researchers, survey researchers studying social problems, or human-factors specialists interfacing people to machines. Some of us study or intervene in large organizations, such as commercial enterprises, communities, or prisons; others counsel school children, help the mentally or physically handicapped, help improve preschool programs, or provide psychotherapy to distressed individuals. Even the

laboratory psychologists differ greatly in what they actually study and do.

So, if we classify psychologists by what we do, there is little doubt that the field has been fragmented for years, and its fragmentation is increasing as psychologists become involved in an ever-expanding range of activities. We may ask, what is causing this fragmentation, and does fragmentation portend bad things for the science and profession of psychology?

I think the fragmentation reflects two different trends. One trend has been the development of a diverse range of applications of psychology to many different sorts of problems. Each applied setting has its own breed of specialist, from industrial organizations to the school counselor's office, from mental health clinics to rehabilitation centers, and so on. Psychologists also tend to cluster into topical interest groups, such as those with interests in political or religious behavior, conflict resolution, women's issues, minorities, or cross-cultural studies. These applied and topical interests have spawned the many divisions of APA that attract their adherents to specialized meetings within and beyond the APA convention. So, that is one reason for the fragmentation of psychology.

A second reason is that fragmentation is a perfectly natural outgrowth of the maturing of a science. We are following in exactly the same path as older sciences, such as mathematics, chemistry, and biology. A science grows over time by covering more ground, addressing new but related problems, distinguishing between cases and differentiating among types of things or topics that it formerly lumped together, and obtaining new findings and elaborating new concepts and theories around them. A frequent metaphor for the growth of a science views it as an expanding tree that sends out branches, then more branches on those branches as more phenomena are discovered and as new concepts are developed to explain them. To carry this metaphor to an unflattering extreme, an individual scientist is like a small bug feeding on a succulent leaf at one end of a tiny branch and perhaps talking to the other bugs feeding on the same leaf.

Each branch is a topical specialty. In psychology as in other disciplines, we have many hierarchical levels of

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This article is based on a talk presented within a symposium, "The Fragmentation of Psychology?", organized by Michael Wertheimer and held at the 100th Annual Convention of the American Psychological Association in August 1992. As president of the American Psychological Society at the time, I was invited to express my opinion on the topic of the symposium. I thank James McGaugh for discussion of these issues.

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specialization. For example, in the study of human abilities, one high-level ability is sensory perception, which divides into different senses of vision, audition, and so forth. Each of these divides further (e.g., vision divides into the perception of color, brightness, motion, objects, depth, and scenes). Furthermore, each of these specialties can be examined from different perspectives, in neurophysiological or behavioral terms, or one can study its development from infancy. In this manner, it is only a bit of a stretch for us to understand why someone might become a specialist in comparative development of neurophysiological substrates of color vision in mammals and still be called a psychologist.

This last example also illustrates another division in psychology that we all live with, namely, that psychology really has three distinct subject matters. Roughly speaking, they are behavior and its neurobiological substrates and phenomenological experience. Although psychologists typically specialize in one of these subject matters, we occasionally try to tie together two or more of the areas. Some of the more interesting research attempts to correlate brain events with either behavioral or phenomenological events. For example, Mike Posner and his associates (Posner, Petersen, Fox, & Raichle, 1988) have correlated a higher metabolic rate in a frontal cortical area as measured by position emission tomography (PET scan) with a specific kind of cognitive operation in humans, or electrophysiologists have correlated the P300 bump in the evoked cortical response with the subjective experience of being surprised. In fact, human neuropsychology is a field dedicated to looking for correlations between brain events and psychological functions.

To return to the theme of the fragmentation of psychology, I have noted that it is a consequence of the natural maturation of the science and the expanding range of its applications. But rather than call this *fragmentation*, why not label the process one of *specialization*, which has fewer negative connotations? After all, most people do not think specialization is so bad, especially when they need a doctor who specializes in what ails them.

I do not deny that this increasing specialization creates serious tensions when we must decide what topics and specialties should be covered in training students at both undergraduate and graduate levels. We are all familiar with these vexing questions: "What is the core of psychology? What must be taught, and in what order? How do we certify sufficient expertise by the teachers or by the students who want to become credentialed psychologists?" Many of these are local decisions best left to the training faculty at a given school. Then I think we should permit free market forces to operate, letting students and the society as a whole decide, by voting with their feet, whether they want to pay for that kind of training or hire graduates of that kind of training program. But these issues are highly politicized at present, and it would be foolhardy to try to do justice to them in this brief essay.

Of relevance to APA and the American Psychological Society (APS), the specialization of psychology I men-

tioned has led to the proliferation of specialized professional societies, both scientific and applied in nature. For instance, the recent summit meeting of psychological societies called by APS brought together approximately 68 different American psychological organizations or societies, and probably some others chose not to participate. Most of us belong to several such professional organizations. (For example, I counted 11 for myself, and I am not an especially sociable joiner.)

However, despite this specialization, I still firmly believe that there are several important functions to be performed by large national umbrella organizations such as APS, APA, and the Federation. Such organizations provide many professional services for their members, such as publications, international exchanges, job placement services, and interesting newsletters that maintain a sense of community. The societies also help to set uniform standards for professional ethics and for accreditation of training programs, and they hold national conventions at which members can exchange information and at least try to talk to one another.

National umbrella organizations also provide us with a forum and a platform in which we can come together to reaffirm our common interests and values. As a group, psychologists share a large number of personal and scientific values and beliefs. These include an interest in understanding the mind and behavior, a respect for empirical evidence to decide whatever issues it can, a preference for data over tradition and authorities, and a generally liberal political agenda that includes using our knowledge to reduce suffering and to promote mental health, social equality, personal freedom, and human welfare. We certainly should not be reticent to acknowledge or promote these common values.

But for me personally, one strong reason to support national professional organizations is that, unlike the smaller specialty groups, the umbrella organizations help us to aggregate and focus our advocacy of policy issues that are under consideration by Congress, the administration, regulatory agencies, and federal agencies. One need not be a rocket scientist to realize that the health of our profession, our educational system, and our mental-health delivery system is strongly impacted by the actions of Congress and the administration because they make funding and regulatory decisions that trickle down to affect nearly every one of us, whether we be academics or practitioners.

Our umbrella organizations can serve as information resources, providing position papers, testimony, and advocacy for our interests before Congress, state legislatures, regulatory boards, and federal funding agencies. Through them we can forcefully advocate our positions regarding a host of issues of vital interest to us, such as student aid, fellowship funding, training grants, research grants, overhead rates, treatment of laboratory animals, the uses of personnel selection tests, the licensing of psychologists, and the reimbursement of psychologists under health insurance plans. Our interests are best served collectively if we agree on such

topics and pull together in advocating our position in public policy forums. That is one way for our profession to influence appropriations and legislation that affect us and affect the students we train and the clients we serve. And the number of voters in an umbrella organization is important. One thing that legislators learn very early in their career is how to count votes. Of course, it is important that we also have evidence and persuasive arguments to support our position.

Thus, I think that psychologists have good reasons to join and support national organizations such as APS and APA. Doing so follows an age-old method used by nearly every group of kindred souls who want to protect their interests and promote their values.

#### REFERENCE

- Posner, M. I., Petersen, S. E., Fox, P. T., & Raichle, M. E. (1988). Localization of cognitive operations in the human brain. *Science*, *240*, 1627-1631.