

Job Crises Defined

Colleges can cut dropout rates and industry lower its "quits" level if they follow some principles developed by the Peace Corps.

During the Peace Corps' first two years, psychiatrists had an unequalled opportunity to study the dynamics of job adjustment and discover the crisis points, said Dr. Joseph T. English, formerly chief psychiatrist of the Corps' medical staff, now at the Office of Economic Opportunity.

Volunteers invariably passed through four crisis points in the course of their two-year term overseas, said Dr. English—arrival, engagement (work crisis), acceptance (philosophical crisis) and return.

This schedule would not be exactly duplicated in either education or industry but it could serve as a guide.

Peace Corps experience revealed that the right kind of moral support from administrators during these crisis points was more important than either selection or training in assuring a good job, said Dr. English. If the Peace Corps has a single lesson to offer, it is that "support is the critical thing."

He said colleges—which have a dropout rate exceeding 50%—believe their problem lies in selection. But if they put more time in supporting students through critical periods, he said, their rate would probably decline rapidly, as it did in the Peace Corps. He thinks the same would apply to industry.

Support does not have to come from psychiatrists or counselors, he emphasized. In fact, it is most effective when offered by faculty members and employers. "We have not begun to realize," he said, "how effective teachers and employers can be if they don't separate themselves from a human supportive role."

In the Peace Corps, psychiatrists worked primarily with the staff, teaching them to recognize crisis points and recommending simple procedures to circumvent serious trouble.

For example, during the early crisis of engagement, volunteers were depressed, feeling inadequate. Calling them together for a work session alleviated their depression. Later, during the acceptance crisis, volunteers had become antagonistic and critical of the Corps' mission. Administrators were advised not to get angry, but to take the volunteers home and listen sympathetically.

Psychiatrists found they did not have to be in the field, said Dr. English. Similarly, in industry and schools, he said, the psychiatrist's most important role may be to advise the supervisors.

Gap Between Sciences Narrows to Fine Line

by Patricia McBroom

Since Pavlov's dog first salivated to the sound of a bell, scientists working in the field of conditioning have narrowed the gap between themselves and other psychologists to an exceedingly fine line.

They are now firmly entrenched in the realm of learning and emotion, working via the autonomic nervous system which controls heart rate, blood flow, glandular secretion and the like.

At a recent meeting of the Pavlovian Society, conditioning theory appeared capable of explaining everything from heart disease to unemployment.

Yogis mystified the Western world for years with their seeming ability to control internal organs. Then recently Pavlovian scientists demonstrated that animals have the same talent, opening up fertile ground for speculation. Dr. Jorge Perez-Cruet of Johns Hopkins University explained the implications.

Suppose a high-powered executive always does well when his heart rate happens to be high, he said. The man comes to associate an accelerated heart rate with the gratification of good business and so keeps the heart beat fast most of the time.

Both the control and knowledge of it exist below the level of awareness, but learning, in the full sense of the word, has nevertheless taken place, said Dr. Perez-Cruet. Heart rate precedes the event; it does not simply react.

After several years of strain, the man has a cardiac condition.

But learning, or operant conditioning as the Pavlovians call it, is flexible. Therefore, if a man can learn to speed up his heart, he should also be able to slow it down, once techniques for doing so are established.

There is now sufficient evidence for believing such voluntary control is possible, but theory to explain how it works is still emerging. One was presented by Dr. A. H. Black, a Canadian psychologist from McMaster University in Hamilton.

Working with temporarily paralyzed dogs, Dr. Black trained them to maintain their heart rates above a certain level, to avoid being shocked. However, while the animals' hearts were speeding along, Dr. Black discovered that their brains were continually sending messages to move, though the animals were immobile.

He suggested that autonomic activity is not in itself directly trained; rather it responds to "intentions to move." Thus, the dog keeps his heart beating by "thinking" movement, and the Yogi

slows his to a snail's pace by dispensing altogether with any intention of moving.

Superficially, Dr. Black's explanation would appear to dampen much enthusiasm for the new research.

In truth, it does not change the fact that heart rate, blood pressure and other autonomic activity can be subject to individual will, regardless of whether control rests in the motion or visceral (hypothalamic) brain centers.

Another plank in the bridge between physiology and psychology was laid by Dr. Albert Ax of the Lafayette Clinic in Detroit.

The ability to form a conditioned reflex may be a measure of the ability to form useful social habits, he said.

Schizophrenics have trouble establishing a classical conditioned reflex of the kind Pavlov's dog accomplished. So do many aged people. In fact, those quickest at forming a reflex are children under the age of five and six.

In preliminary studies, Dr. Ax found that human derelicts also apparently lack some conditioning ability. They were considerably slower in transferring a pain reaction—from the original stimulus—electric shock—to a tone associated with that shock.

Learning anything requires motivation. Such motivation resides largely in the brain's emotional system, particularly in the hypothalamus—control center for visceral activity, said Dr. Ax.

Thus the speed with which an individual's autonomic nervous system becomes conditioned may well be a window on how well-motivated he is to learn and how easily he accepts the conditioning of society.

In short, the conditioned reflex could be an "emotional IQ" for motivation to learn, said Dr. Ax, just as the achievement test is a measure of intellect.

Not surprisingly Dr. Ax's schizophrenic patients and his derelicts differed widely in their initial reaction to electric shock. The patients reacted strongly, even surpassing healthy adults, but were slow in transferring the reflex from shock to tone. The derelicts, on the other hand, had a low-level reaction to begin with and were similarly slow to be conditioned.

Dr. Ax theorized that where healthy people become accurately conditioned socially, schizophrenics, by overreacting, become inaccurately conditioned—thus their irrational and delusional behavior—while down-and-outers do not react enough to be conditioned at all. He said the cause of impairment could be either genetic or environmental.