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1999

THEORETICAL CONSIDERATIONS ABOUT STRESS IN CORRECTIONS

Stress and burnout are two current buzz-words in the corrections community. Workships, lectures and research articles are appearing frequently which apply work already done in the area of occupational stress to correctional employment. Training programs in some correctional facilities are offering stress awareness sessions for both security and rehabilitation staffs. Private consultants are providing treatment services for "stressed" and "burned-out" workers. Employees are filing disability claims based on the effects of debilitating stress.

Law enforcement personnel have a head start on corrections workers in the recognition of occupational stress. There are numerous articles and dissertations discussing the stress of police work and pinpointing the "uniquely" stressful characteristics of police work, such as bearing bad news to a serviced public (McLenahen & Lofland, 1977) and tolerating excessive leniency of courts (Kroes, Marsolis & Hurrell, 1975). Cheek and Miller (1977) commented that, "on the surface of it, the exceptional stress of law enforcement personnel in general might be attributed to unique attributes of their roles." Police and corrections workers however, may tend to ignore the similarities of their work to other occupations, and in so doing may exaggerate the stress effects of job characteristics thought to be unique. Studies of occupational stress done by the National Institute of Occupational Safety and Health (NIOSH) add some perspective to our concerns about police work and corrections in relation to other occupations. NIOSH (1977) analyzed Tennessee hospital and death records to determine which jobs rated high in the so called stress-related illnesses, including heart attacks, ulcers, arthritis and mental disorders. Neither police nor corrections workers made the top ten. These results do not mean that corrections and law enforcement are not stressful occupations. The results do suggest that other occupations have similar or at least equal potent stressors to those experienced in law enforcement and corrections. The results might also suggest the exercise of caution in our

conclusions about the effects of stress in our occupations and our recommendations about what to do about it. Should correctional administrators, for example,spend sizeable sums of money on treatment of employee stress if the research does not support such an emphasis? That there is currently much attention being paid to stress does not prove the seriousness of the problem. The purpose of this article, then, is to focus attention on the subject of stress in corrections and to clarify our conceptual understanding of it in relation to the correctional environment.

What do we know about occupational stress in corrections work? Is there a clear notion of what stress is, what its causes and effects are? When different writers talk of stress do they have the same meaning? It may be helpful to examine how the work stress has been used in various contexts to determine if the concept is specific and reliable enough to draw conclusions from the work already done.

Defining Stress: Different Perspectives

The medical investigation of stress began in the 1920's with Hans Selye, now recognized as a leading authority on the subject. Selye (1974) defined stress as "the non-specific response of the body to any demand made upon it." Those non-specific responses are seen primarily in the adrenal cortex and the thymus, a lymphatic organ in the chest which is mainly involved in immune defense reactions. Demands on the body create specific responses as well: Muscular effort increases heart rate; physical exertion produces sweating. But the body's non-specific response to demands, whatever they may be, is the same. The physiological evidence points to the existence of a regulatory mechanism which restores the body to an even state, a process known as homeostasis. Thus, stress is defined as a physiological effect of a stimulus or demand.

Selye (1974) wrote that psychological and physical stressors have identical non-specific effects (cause the same stress). Each physical stressor has its own specific effect, but psychological stressors are, be definition, mediated through man's mental apparatus. Consequently, psychological events that actually result in stress (non-specific physiological responses) are highly variable from person to person. Individual interpretation of events determines whether stress will appear. There are two important distinctions here: 1) on a physiological level the relation between stressor and stress is clearer than on a psychological level where events and happenings may or may not actually result in stress; and 2) there is a difference between stressors and stress.

While Selye is quite clear that stress is a non-specific bodily response to stressors, he did not make obvious the mechanism by which psychological events eventually produce the stress response, other than to imply that the process starts in the "mind." Furthermore, he did not clarify how specific bodily responses

are initiated by psychological stressors. Researching the linkages between mental and physical eventsis a complicated area of study and investigators are researching this subject. But there is danger in assuming that these linkages are now well defined, particularly when attempting to analyze the complex effects of a social environment on an individual's psychological processes, effects which then may result in physiological changes.

Let us look for a moment at another writer's definition of stress to see how the criteria for defining stress shift subtly from the physical effects to the psychological states. Brodsky (1977) wrote about long-term work stress in teachers and prison guards (This comparison of other occupations with corrections is helpful because it reduces the tendency to overplay the unique aspects of corrections work.) Similarities were recognized between the two occupations, specifically that both teacher and guard serve as caretakers of persons who are not served by choice, but by force of law. A physician, Brodsky chose to define stress psychologically as "the awareness of awareness, the recognition that one is not functioning automatically, together with the suspense and anxiety that accompany this state." There is nothing inherently objectionable to such a definition, but it is quite different from Selye's approach. Brodsky stated that this psychological state of "awareness" has profound medical implications and noted the presence of somatic symptoms (general) musculoskeletal tension and gastrointestinal symptoms) in workers who exhibit this "awareness." The causal linkage between the "awareness" and somatic symptoms, however, was deduced by the concomitant appearance of both variables, not by explanation of the physical mechanisms involved. Although the research by Brodsky was clinical, the inferences were drawn by essentially correlational methods. "Common sense" and "clinical judgment" allow one to see that workers who are filled with suspense and anxiety and who are aware of not functioning automatically have psychological symptoms.

A similar inferential process occurs when researchers attempt to link social or envrionmental conditions with psychological states. Brodsky outlined conditions precipitating long-term stress: disorder of unruly students or inmates, threats of violence, restrictions on retaliation, perceptions of favoritism, and contradictory job objectives. But Brodsky's stressed workers were a select sample of employees who applied for disability payments, having come from an environment believed to be the cause of this long-term stress. The relationship between environment and psychological state does not seem as clear when it is recognized that the majority of workers in the environment in question did not apply for disability payments.

Sometimes, as in the NIOSH study, researchers link environment directly with physical symptomology i.e., certain occupations have higher incidences than others of what we assume are stress related disorders. Cheek and Miller (1979) also use this approach and by implication defined stress as the presence of physiological disorder: "though research findings are not available, many observations suggest that stress for corrections officers is similarly high---the rate of heart attacks among correctional officers was one of the highest among the various groups...." Thus, stress is not defined as a non-specific body response, ala Selye, or as a psychological state, ala Brodsky, but rather as a specific body response. However, the mechanism by which the environment leads to specific body action (i.e., heart failure) is left unexplained. Researchers draw conclusions from the evidence of increased probability of certain illnesses of workers in defined occupations.

It is also possible to define stress in terms of behavioral effects, such as marital disruption, absenteeism, increased aggression, etc. Both Brodsky and Cheek and Miller used this method also. It is not logically necessary to assume

that behavioral effects must be accompanied by physiological effects, except insofar as the body must respond in order to actually move in its environment. A couple going through divorce must behave, act, but this does not prove that there are, for example, non-specific body responses as defined by Selye. This is, however, frequently implied, or inferred by the reader, because of the juxta-position or co-existence of behavioral and physical effects.

The issues being outlined here revolve mainly around unclear or inconsistent definition of stress and resulting confusion in cause-effect reasoning. Figure 1 shows the connections between social or environmental conditions, psychological states and behavioral or physical effects and how researchers tend to investigate relationships among them. "States" and "effects" seem to be the usual criteria for defining stress. The "common sense" reasoning in corrections tells us that a "stressful" enviornment (conditions) causes "mental upset" (states) which in turn leads to behavioral or physical consequences (effects.) The next section will further explore the dangers of unclear definition of stress and problems in cause/effect reasoning.

IMPLICATIONS OF CONFUSING DEFINITION

Why is it important to understand the concept of stress? What difference does it make how stress is technically defined? Isn't it enough that there is general agreement that work in corrections is stressful, no matter how stress is defined? The major difficulty caused by inconsistency of definition and the lack of conceptual clarity stems from illogical inferences or conclusions and unwarranted assumptions about the causal sequence of events in "stress" produced disorders.

One possible error is to analyze connections between social or environmental conditions and psychological states and then to imply that physical or behaviroal effects observed in the population studied stem from the "stress" precipitated by the conditions studied. This is implied without explanation of the linkage or mechanisms between psychological states and physical or behavioral effects observed in the population studied stem from the "stress" preciptiated by the conditions studied. This is implied without explanation of the linkage or mechanisms between psychological states and physical or behavioral effects, effects which can often be as easily explained with other phenomena. For example, that corrections officers may have high rates of coronary disorder might be explained by showing that "coronary prone" personalities are attracted to this kind of work. The work environment may not be inherently stressful, if stress is defined as coronaries (physical ailments) produced in some way by the social or physical environment. Without adequate theoretical description also of linkages between psychological states and physical effects, it is difficult to regard as adequate information that just links social and environmental conditions with psychological states and then stops. If stress is defined not as a physical effect but as a psychological state, then evidence pointing to connections between "conditions" and "states" is sufficient so long as the meaning of stress stays constant and does not shift unintentionally to physical or behavioral effects.

Sometines, researchers are forced into elaborate explanation of data which do not support the "common sense" (stressful environment, upset psychological state, behavioral or physical effect) sequence. Cheek and Miller hypothesized that corrections officers would show "stress" in awareness of their own psychologic states and in physical effects. They found adequate evidence that officers suffere serious physical health disorders but, when surveyed, the officers did not report themselves as especially psychologically unhappy or stressed. Cheek and Miller explained this as psychological denial of men who were unable to acknowledge their distress, an act that would be unmanly. Such an explanation may be valid, but there are alternative explanations. For example, corrections officers may just be physically unhealthy because people who apply for such work tend to come from families which do not emphasize adequate health-maintainence habits. Perhaps a random sampling of people from the total population would not develop physical disabilities if employed in corrections.

Another danger of unclear definition of stress can be seen most clearly by looking at the "psychological states." If stress is defined as tension, anxiety, or awareness of loss of functioning, it is difficult to objectify and make reliable. If one observer labels a person stressed, but another observer does not, we really have not made any prograss. Furthermore, measuring amounts or degrees of stress is problematic, but this is a methodological problem which proper research techniques can try to counter. The primary problem is whether we are willing to define people as "stressed" anytime they are anxious, tense, frustrated or unhappy. The word stress loses its precision by degenerating into a condition which anyone could claim to experience if it were convenient to do so.

A similar problem of definition develops when we examine stressful environments Corrections environments have often been examined in terms of organizational confli and ambiguity, deteriorated and depressing physical conditions, increased probabili

of physical and interpersonal conflict, and numerous other conditions which few people question as a cause of employee dissatisfaction (Brodsky, 1977; Pava, 1977). But once again, is any organizational problem or ambiguity, interpersonal disagreement or imperfect physical facility stressful?

The failure to clearly define stress is harmful also in that it clouds the complexity of relationships among and between environmental or social conditions, psychological states, and behavioral or physical effects. The relationships probably are not uni-directional (conditions → states → effects). For example, it is conceivable that an individual's failing health (i.e., coronary disease) has some influence on his psychological state (i.e., tension, anxiety) and if the psychological state is the measure of stress, then health influences stress and not the reverse. Of course a person's health may create enough stress (psychologically defined) which, in turn, may have other physical effects (i.e., non-specific body responses as discussed by Selye). (Notice in Figure 1 that the lines between conditions, states, and effects do not show direction, implying that influences may flow in both directions.) Thus, without an understanding of possible relationships between conditions, states and effects, it is easy to confuse cause-effect relationships or at least overlook possible influences.

Another potential problem stemming from lack of conceptual clarity of stress is overgeneralization of results. As noted in the research cited (Brodsky, NIOSH, Cheek and Miller) the approach to explain the causes of stress is intuitive and/or associational; one notes apparent pairings of phenomena and measures the association in some way. Not only does such methodology lend itself poorly to causal inferences but leads one to make assertions about individual cases. It is tempting to blame a "stressful" work environment for an employee's health problem when statistics show a disproportionately high number of people in that environment have that problem. Not only is causation not proven, but the individual case could be an exception to an otherwise valid inference anyway. This can become an important issue in

workman's compensation disputes in which an employee may want compensation for problems actually caused by stressors outside the work environment. Research has increasingly indicated that stress is a factor in physical illness, but this is not a simple cause-effect relationship. The interaction of personality and disease for example, has been studied in coronary heart disease, (Friedman, Roseman, 1974), but there are still many questions about individual susceptibility to stress related disorders. The study of the correctional environment is useful but should not overlook the issue of individual variability. It is too tempting to blame the environment for everything.

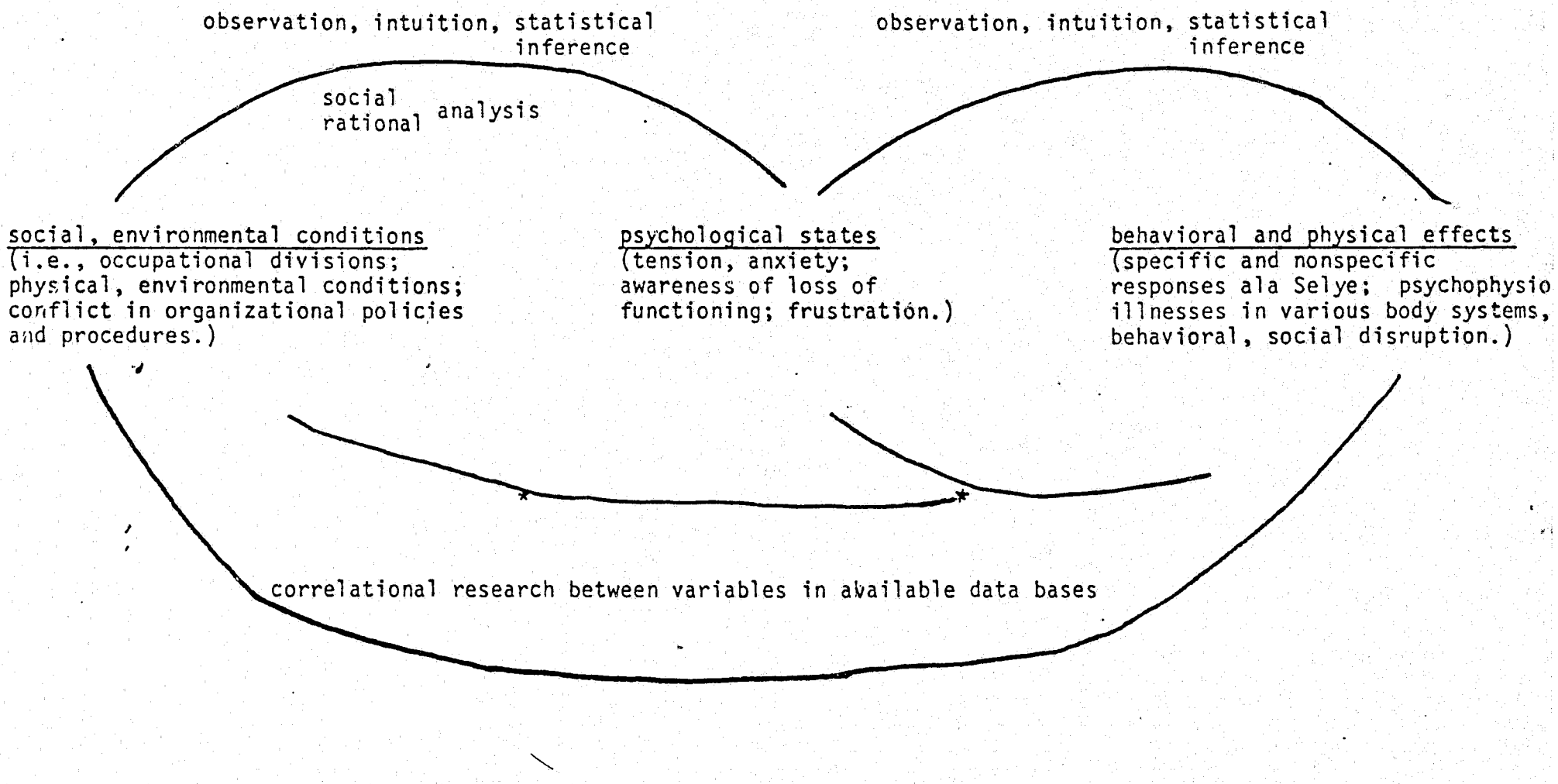
Need For Careful Investigation

It is difficult to do tightly controlled experimental research in the social sciences, and if only questionaire and survey data are available, then care must be taken not to overinterpret. Increasing attention is being paid to quasi-experimental designs in evaluation research, and these techniques may help clarify stress in correctional environments. The increase of training programs and treatment services developed to help "stressed" employees provides an excellent opportunity to evaluate the effectiveness of these programs and services, and to research the theoretical foundations on which they are based. Without demonstrated need for " stress" services and without proven effectiveness of efforts to counter stress, there will soon be a new "cause celebre" to capture everyone's attention because funding for stress programs will disappear.

But before programs are funded and before the first number is generated to evaluate those programs, efforts should be made to articulate assumptions and clarify reasoning about the phenomena being observed. The failure to do that seems to have resulted in ambiguous meanings about what stress really is. At the very least, there is apparent disagreement among writers to date over the definition of stress in the correctional environment. It is hoped that this article will at least encourage investigators to define and state their definitions of stress

and stressors, whether couched in the language of environmental and social conditions, psychological states or physical and behavioral effects. In many cases investigators and consumers of stress research are not satisfied with evidence that employees are merely unhappy with such work conditions as unclear expectations, overwork, and role ambiguity. There is a need to relate this dissatisfaction with "real" consequences, such as missed work due to illness. Otherwise, it is difficult to justify spending money on measures to correct the problems. Unfortunately, in the process of winning support for needed programs, it is tempting to oversimplify the complex nature of stress. In addition, the emphasis on finding physical or behavioral effects due to environmental or social conditions may overlook an important point - that correcting deficiencies in physical and social environments may be worthwhile even if such changes influence only an employee's psychological state, which is an important humanitarian end in itself. Changing an environment in order to help people feel better mentally may or may not result in changes in their physiological or behavioral states; that is a subject for good research. Clear definition of stress and description of relationships being observed ultimately should help researchers to explore stress and consumers of research to work for change in a rational and productive manner in the correctional environment.

Figure I



* It is also possible to research the actual physiological mechanisms by which brain states are translated through neural pathways to the body and it is possible to study physical environmental stressors (heat, cold, for example) and their effects on the body. But these are not the main issues in the discussion of occupational stress.

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