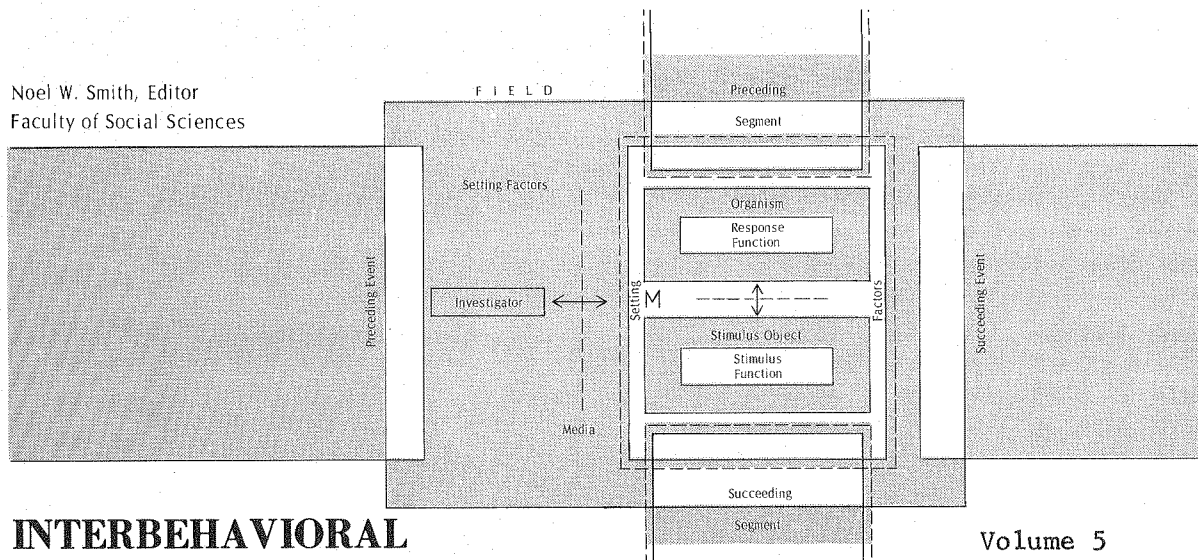


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The nub of the problem, I believe, lies in the following observation: Psychologists and nonpsychologists invent and use motivational terms in the same situations for the same purposes or reasons. They apply motivational terms to describe and explain the conduct of animals--human or otherwise. Certain aspects or properties of behavior are called motivational in contrast to others which are grouped and labeled by other words. The psychologist (and the nonpsychologist, too) tries to formulate the uniform and essential characteristics or properties of motivational phenomena. He attempts to discover their mode of operation and their causal history and consequences. He especially tries to relate motivational phenomena and what he knows of them to nonmotivational phenomena so that he can reach his objective of explaining and predicting the conduct of organisms. In order to do this properly he should be able to distinguish between motivational and nonmotivational phenomena explicitly. So far, he has not been able to do this.

R. A. Littman in Nebraska
Symposium on Motivation, 1958



The following back issues of the Newsletter are still available and will be sent gratis upon request: Vol. 1, Nr. 1, 2, 3, 4; Vol. 2, Nr. 4; Vol. 3, Nr. 2, 4; Vol. 4, Nr. 2.

The Newsletter has received a request to publish "Request for information: A Study of the Confi-

dentiality of Social Science Research Sources and Data." This study developed as a result of the imprisonment of Prof. Popkins of Harvard for his refusal to answer questions regarding the publication of the Pentagon papers. He had obtained information from confidential sources during his research on Vietnam and refused to answer on the grounds

Crude Data

Investigative Contact

Scientific Construction

of the First Amendent and the failure of the government to show that his information was relevant and necessary to the government investigation. To quote from John Carroll's "Confidentiality of Social Science Research Courses and Data: The Popkins Case," Political Science, 1973, 6(3): "In the past scholars believed that they were able to assure sources of anonymity because the release of any information gained was deemed to be solely within the scholar's discretion. Recently, however, with increasing number, prosecutors, congressional committees and grand juries have become interested in the sources of scholarly research. As in the instant case these bodies have asserted the right to inquire completely into a scholar's sources of information. Notes have been subpoenaed and scholars questioned as to their research. As a result, scholars carrying out their research are no longer secure in the belief that research material provided them in confidence will be free from pressure of court-ordered disclosure at a future point and as such are impaired in the collection of research data. The problem has been aggravated by the widespread publicity given to the instant case. Until limits of public inquiry are authoritatively settled by this Court, scholars cannot be certain of what protection, if any, they can assure their sources, and sources cannot predict the possible repercussions of cooperation in furnishing information. The resulting uncertainty impinges upon normal scholarly inquiry and inhibits research into many social and behavioral problems most in need of immediate research and enlightenment...Amici support the position that before requiring a scholar to testify or furnish documents, a court should balance the interest of the inquiring agency against the First Amendment rights of the scholar." While psychologists are not often involved in gathering data of a political nature, they often do solicit information of a personal nature where the respondent is assured of anonymity. Popkins has received support from a wide variety of professional organizations. The Carroll article is recommended for a detailed account of the case and its implications for research.

The feature article is by Steven Johnson and was written when he was working on a Master of Arts in experimental psychology. He has now completed the degree and is looking for a Ph.D. program.



The Springs of Action: A Fountain of Youth?

Steven L. Johnson

The approaches to the area of psychology called motivation are as diverse as are the behaviors psychologists choose to study. Motivation has run the gamut from learned drives to instinct to setting conditions to physiological needs and has come out as a tattered, but still lively topic in psychology. Littman (1958) proposes motivation as the category under which are subsumed the actives of psychology. By this Littman means anything which does something to some other thing. The definition of "actives" contrasts with "passives" in that passives are those things which have something done to them. He, and Madsen (1968, p. 46) also, suggest that motivation is categorized by those things and events which activate, direct, and make persistent the behavior of an organism. Undoubtedly these "definitions" of motivation include disparate topics in psychology and are not specific enough or limited enough to easily distinguish motivated and non-motivated behavior. However, more specific types of motivators (drives, incentives, physiological needs, etc.) lack the generality to encompass the whole of what is meant by motivation.

Perhaps the problem of defining motivation is capsulized in the principle of Gestalt Psychology--the whole is greater than the sum of its parts. Perhaps, on the other hand, motivation is a vapid area which has no real parts to be summed. The latter statement seems to paraphrase Littman's (1958) conclusions about motivation. He explicitly states that there is "...no hope for a master schema that will encompass all motivational phenomena."

What is the goal of motivational psychology? Surely, it must be the same as the goal of all psychology (and generally all science) to explain and predict behavior. This is essentially answering the question: how does behavior occur? It is a description of the events which cause another event to occur. Once a complete system of the interrelations of types of events which invariably precede or are preceded by other events can be constructed one is able to account for any action which occurs and to predict the subsequent events. The goal of science is then reached.

To ask for the reason for an action one either wants the mechanism of action (how something works) or what initiates the action (why it works). At low levels of understanding the answer to why (what initiates) is often meaningless since to name an initiator is of little aid in comprehending an activity unless the events which are being started are understood. To say a man engages in friendly behavior due to some force (need, drive, instinct) means little unless one understands the particular relationship of the events prior to a display of friendliness and the actions during the display. If the interrelations are understood, speaking of the "force" which initiates the behavior (the set of prior and current conditions) has meaning as a summary of a set of generally correlated behaviors. It assumes the beginning of an episode (activation) and that the episode will continue in a certain manner (direction) until the force is removed (persistence).

Motivation theorists are often attempting to use a descriptive term (a motivating force) to describe the initiating conditions of a certain class of behaviors. The question of the usefulness of the concept of motivation becomes relative to the degree of understanding of the behaviors which are being initiated. To say

that a person eats due to hunger motivation simply means that hunger (deprivation of food for a period of time) is correlated with eating. Nothing more is added to an understanding of eating behavior than is added to an understanding of electrical incandescence by the correlation of a switch position and a light bulb lighting.

The diversity of activities, behaviors and experimental methodologies subsumed under the term motivation may well be due to an attempt of psychologists to study both the "how" (the isolation of objective correlates of behavior) and the "why" (the classification of groups of major correlates of behavior) questions concerning the behavior of organisms simultaneously. It seems that many of the theories of motivation discussed in psychology are concerned with trying to locate the springs of action of behavior before the behaviors themselves are understood. That is, psychologists tend at times to postulate motivating forces rather than understanding the behaviors themselves.

The hedonistic theory of P. T. Young (1959) is a motivation theory which postulates principles of action which ultimately should allow one to explain almost any series of behaviors. Young's theory assumes the existence of affective processes of positive and negative sign. Organisms try to maximize positive and minimize negative affects. This is, in Young's system, the guiding force or principle at the core of all behavior.

Young has presented empirical evidence for his hedonic theory through the use of preference tests for various concentrations of sugar solutions (Young and Shuford, 1954). It was found that well-fed and watered rats would run faster for higher concentrations of sugar solution than for weaker solutions. If the animals were presented with another concentration of sugar solution after training with one concentration, their running speed varied directly with the change in concentration. Because the animals were not in obvious need of nutrient or liquid, Young discounts drive reduction or need reduction as the mechanism of this change in performance. Rather, he believes the simplest accounting of the rats' behavior is that contact with the sugar solution aroused a positive affective process in the animals. This seems to account for the correlation of concentration of sugar solution and running speed.

Young strengthens his case for hedonic process by reference to the work of Olds (1955) on the effect of stimulation of areas of the brain and bar pressing in rats. In these studies rats were able, by pressing a bar, to deliver a pulse of electric current to a certain area of their brains. The rate of bar pressing varied with the area of stimulation. Stimulation of some areas produced increased bar pressing, while other areas produced a reduction in the rate to zero. Although Olds accounts for this relationship between an operant response and electrical brain stimulation by reference to the reinforcing properties of the stimulation, Young believes the stimulation produces a positive (negative) affective process which sustains (inhibits) the patterns of behavior which are instrumental in arousing the affective process.

What difference can there be between reinforcing and arousing affective processes in this situation? The objective situation is the same, but two different terms are being used as explanation. The difference seems to be the amount of surplus meaning carried by the two concepts. Young opts for affective processes which are physiological in nature and have behavioral correlates: "Whether or not

Dr. Olds has placed his finger upon the physiological basis of affectivity remains to be seen. Apart from this, however, some physiological basis must be assumed to account for the facts. Affective processes exist objectively within the tissues of organisms" (Young, 1959). Olds, on the other hand, prefers to say the electrical stimulation is reinforcing. That electrical brain stimulation in certain areas of the brain will increase the probability of an instrumental response occurring. This statement does not imply that activity in a certain region of the brain is the nature of reinforcement, but only that induced activity in a certain area acts as a reinforcing stimulus. It seems the motivation theorist Young is more willing to physiologize than the physiological psychologist Olds. Young's tendency to reduce psychological functioning to biological process is an attempt to find out "how" hedonic processes work when all that is known is that an event (positive affect, reinforcing stimulus, satisfying state of affairs), when paired with a behavior, tends to increase the probability of the behavior occurring again. To postulate as Young has done is like postulating that the turning of a light switch in a certain position causes vaporous excitations to be activated in the body of a light bulb causing the bulb to become incandescent. The statement is mechanically incorrect, but it does express the correlation of switch position and incandescence. So, analogously, Young's hedonic process may express the correlation of certain events and behaviors, but it may do so at the expense of adding misleading surplus meaning to an analysis of the total situation. It would seem more appropriate to state the correlation directly, so that the relative importance of the various components of the situation might be more clearly seen, without a fog of hypothetical motivators.

David McClelland also proposes a modern form of hedonism as the force behind human behavior. His theory is based on the definition of a motive as "a strong affective association, characterized by an anticipatory goal reaction and based on past association of certain cues with pleasure or pain" (McClelland, 1955, p. 226). What McClelland seems to be saying is that every motive is a product of the associations of present cues and the probability of a change in affective state. When an organism is in a certain affective state, and the stimulus cues in his environment indicate that an imminent change in affective state will occur, the organism will then instrument behavior to either maintain the affective state, if it is pleasureable, or change the affective state, if it is painful. (It is interesting to note that, in his definition, McClelland has strung together four concepts inferred from behavior. Thus, the definition of motivation, itself an intervening variable, is based on four other intervening variables, all of which are presumably based on the same objective response of the organism as an indication of their operation.)

McClelland states: "The presence of a motive may be inferred either (a) indirectly based on knowledge of past cue-affective arousal associations or (b) directly based on imaginal goal states. Our inferences under condition (a) may be based on our direct knowledge of the particular individual we are studying (as when we infer that the rat has acquired a hunger motive based on the associations during habituation of being handled by the experimenter and being fed) or by the extrapolation from the experience of other individuals (as when we infer that this individual has a high n Achievement in other members of his group)." And, "... the simplest measure we can obtain of the strength of the achievement motive in a human individual is to observe the frequency with which he thinks about achievement as measured through imaginative productions" (McClelland, 1953, p. 232). Undoubtedly, these activities measure some relationship(s) between individuals and their environment, but the question was to whether it is motives which can be inferred is

dubious. Given a certain type response to several TAT cards (an instance of McClelland's simplest and most pure measure of motivation) and certain behaviors of an individual)for example, his behavior tends towards competitive activities with an obvious standard of excellence) which are correlated with that certain type of imaginal response, one would assume, from McClelland's definitions, that the individual has a high n Achievement. According to definition this would be a valid inference. But, might it not be just as valid, if not more exact, to say that the individual's response to selected TAT cards reflects the general class of behaviors in which he participates. McClelland assumes the imaginal response to the TAT cards reflects certain affective states which are integral to the maintenance of his behavior. It could be equally possible that a certain type of persistent behavior could result in TAT responses of a particular sort, without any particular affective state directly correlated with the behavior.

Research has been completed which correlates child rearing practices and the TAT responses from which n Achievement is inferred (McClelland, 1955). McClelland has concluded that this correlation indicates that the child rearing models develop n Achievement motive in the children which leads them to respond in a certain way on the TAT, and to tend to engage in a particular set of occupational activities (business). It is entirely possible that these child rearing practices produce individuals who tend to engage in a particular class of behaviors which in turn tend to produce a certain type of TAT response. Thus, the TAT response may be reflecting the types of behavior in which a person will engage. But, what information is gained from the assumption that the child rearing practices lead to the development of a motive scheme which in turn produces a type of behavior pattern and a certain TAT response? More efficiency could be obtained, it seems to me, if the observable primary correlations were probed to find what other factors (or the specific factors which) influence behavior in addition to the child rearing practices noted by McClelland. By postulating a motive which directs and activates behavior, rather than assuming an active organism whose behavior is directed by past experience, a search for the hypothetical entity of motives is begun which would seem to reduce the effectiveness of searching for the critical events and combinations of events which influence behavior. To say that a "rat has acquired a hunger motive based on the associations during habituation of being handled by the experimenter and being fed" (McClelland, 1955, p. 232) seems to be a complex and overly suggestive way of saying that a rat tends to run faster to food, or eat faster if a certain stereotypical behavior occurs just prior to feeding than if the events just prior to feeding are not correlated with the receipt of food.

In summary, it might be said that although the review of these two hedonistic theories is brief, the criticisms of Young and McClelland are general to most of the statements which they make regarding their respective theories of motivation. The essential nature of their propositions, I think, is expressed. Both of these individuals have contributed significantly to the body of fact in psychology. However, the headings under which they classify their research and the inferences they draw seem to be outside the bounds of a truly behavioral science. Their reliance on hedonism as a source of action does not seem to be necessary to the advancement of psychology. In fact, it may hinder the advancement of the science in that, by postulating hedonistic motives, subsequent researchers may begin to reify the concept of motivation and the search for the entity of motives may begin. As I stated earlier, the hypothesis of a motive process may be useful if the use of a motivational term capsulizes some more microscopic analysis of behavior. As the research of McClelland and Young stands, at this point, the use of motivational concepts do not infer anything more about behavior than does an objective statement of the behaviors which occur.

Littman (1958) concisely states this conclusion: "So, the final moral is that psychologists should do as they have been doing--determine what the properties are of the things they want to study and ascertain what their laws of interaction are. That they also feel constrained to call what they study "motivational" should not be construed as saying very much, if anything, else about it."

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"...we do not find in the literature any clear-cut distinction of a motivated from a nonmotivated event."

J. R. Kantor: Toward a scientific analysis of motivation. Psychological Record, 1942, 5, 225-275.

REQUEST FOR INFORMATION:
A STUDY OF THE CONFIDENTIALITY OF
SOCIAL SCIENCE RESEARCH SOURCES AND DATA

The Russell Sage Foundation is funding a study of events and problems concerning the confidentiality of social science research sources and data. The study will analyze such issues as the confidentiality of survey research data, and the obligation of a scholar to reveal his or her research sources to other scholars.

The study is sponsored by the American Sociological Association, the American Political Science Association, the American Anthropological Association, the American Psychological Association, and the American Historical Association. (The Association of American Law Schools, the Association of American Geographers, the American Economic Association, and the American Statistical Association are considering sponsorship).

The study will begin in February, 1974, and end in December, 1975.

Individuals and organizations are invited to send to the director of the study a statement of (1) any events of which they have knowledge that have raised questions concerning the confidentiality of social science research sources and data, and (2) any problems they have encountered that have involved questions concerning the confidentiality of social science research sources and data. The statement should specify the time and the place and the individuals and the organizations and the circumstances involved in the events and problems. Information provided in response to this request will be treated as confidential unless the individual providing the information consents to its release.

The statements will be used by the director and project board to select events and problems for further analysis.

Statements should be sent to the principal investigator,

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February 11, 1974