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ABSTRACT The focus of this paper is the identification of selected methodological problems in the assessment of personality from the psychoanalytic, behavioral, and cognitive positions. Each of the above methodologies are reviewed and assessed, and specific strategies are proposed for sport personality research. (DS)

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Methodological Problems in the Assessment  
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## ABSTRACT

The assessment of personality has been a troublesome area for sport psychologists. During the 1960's, the beginning of the modern era of psychology of sport in the United States, much attention was focused upon research which assessed the personality traits of athletes. Being a new science, many methodological and paradigmatic problems arose. The result was a mass of voluminous data that was difficult, if not impossible, to evaluate. More recently, and in keeping with the contemporary thrust in psychology, personality is being considered from personologism, situationism and interactionism perspectives. The purpose of this paper is to examine selected methodological and paradigmatic problems in the assessment of personality from the psychoanalytic, behavioristic, and cognitive positions. The coverage is not inclusive but selective of the issues which researchers experience as they attempt to discover why athletes behave as they do. Suggestions for future research in sport personality are explored.

Methodological Problems in the Assessment  
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Within psychology at large, there has been, in the past two decades, an unprecedented lack of progress in the study of personality. This situation has led some researchers to abandon the field altogether or, more appropriately, to critically examine the theoretical and conceptual bases of their work. Hopefully, within the next few years the problems will be resolved or at least lessened and the study of personality will again become an integral part of psychology in general and sport psychology in particular.

The focus of this paper is the identification of selected methodological problems in the assessment of personality from the psychoanalytic, behavioral and cognitive positions. Although American sport psychologists have not been concerned with all of these domains, it is argued that in the future all of them will provide a framework for the study of the many and diverse behaviors of athletes. It should be pointed out, however, that each position has its inherent strengths and weaknesses and that investigators must be able to tolerate considerable ambiguity in order to study a highly complex field like personality. Psychology is not a black or white science and even among knowledgeable persons there exists few areas of agreement. This does not mean that psychology is not a worthy area of study. In contrast, psychology attracts persons who wish to search for answers to some of man's more pressing problems. Understanding "why" man behaves as he does is one of psychology's major objectives. The study of personality has the potential to make significant

contributions to the realization of this goal.

### Science and Personology

Before focusing attention on specific methodological problems, it is desirable to discuss briefly the science-personology interface. Ever since the Wundtian system of introspection was abandoned in favor of Watson's more objective behaviorism, psychologists have devoted a great deal of time and energy attempting to make their discipline a rigorous science. Some scholars (e.g., Finkelman, 1978) argue that this endeavor has been unsuccessful and misguided. A careful appraisal of the history and current status of psychology shows that it has only a weak grasp on the most cherished characteristics of science. Furthermore, Finkelman (1978) argues that an over-identification with science has led to the use of conceptual paradigms and methodologies that are inappropriate and inadequate for dealing with the subject matter of psychology. Located at the intersection of the sciences and humanities, Finkelman contends that forcing psychology into an exclusively scientific mold has had unfortunate consequences. Perhaps sport psychologists in their desire to make personality an objective science will be guilty of this error. Despite our efforts for academic rigor, sport personology, as currently studied, appears to be prescientific. This problem is also true of the study of personality at large. Several prominent personologists, including Fiske (1978), Mischel (1968), and Magnusson and Endler (1977), believe that the application of the scientific method to the study of personality is lacking in academic rigor. They have called for a re-examination of the personality field.

In discussing the relationship between science and personality, four factors must be considered. First, in the established sciences

such as chemistry and physics, there is widespread agreement on certain fundamental facts, their interpretation, and their place in science (Finkelman, 1978). This situation is not the case in personality where we can not even agree on the definition of the term. At last count, there were more than 50 definitions to choose from.

Second, in the established disciplines there is cumulative progress over time. Progressively the explanatory and predictive powers of the science become more precise and encompass more facts and events (Finkelman, 1978). Again, progress in personality has been slow and the explanatory and predictive powers of the field are poor.

Third, in the established sciences, the preferred method of investigation is experimentation. In personality research, correlational and/or clinical studies are usually found.

Fourth, in the natural sciences, mentalistic explanations are usually avoided. What subjects are thinking, for example, may be of interest but since these data are unverifiable they are usually ignored. In contrast, in clinical studies of personality, these data often comprise the major aspects of the investigation.

#### The Psychoanalytic Method

The major emphasis in the clinical or psychoanalytic approach is to secure data about factors which include motivation, adjustment mechanisms, defenses and conflicts. These can be derived from dream analyses, objectives and projective tests, structured and unstructured interviews, biographical information and the observation of behavior formally elicited by the clinician as well as behavior informally volunteered by the subject (Wing, 1968). Often, the client's history of the development of patterns of behavior are studied and attempts to project future behavior are made. Typically, psychodynamic assessment focuses on the individual rather than on studying groups of people. That is to say, clinical studies

of personality are ideographic rather than nomothetic in nature. Furthermore, the psychoanalytic approach attempts to assess the entire personality rather than attempting to measure only certain aspects, e.g., traits.

Another feature of the clinical method is the interest which psychoanalysts have in theory. Garfield (1963) summarized this interest well when he said: "Clinicians are characteristically attracted to theories which postulate internal personality processes and structures only indirectly open to observation" (p. 475). Like other personologists, what the clinician elects to perceive about the individual's personality is influenced by her theories - by the concepts she thinks are important. Thus, the clinician samples behaviors he thinks are most likely to reflect accurately the significant personality characteristics (Wing, 1968).

The major problem associated with this approach is the subjectivity which accompany these analyses. It is not unusual, for example, for experienced clinicians to arrive at different generalizations about the same person. Projective techniques, such as the Rorschach and TAT (Thematic Apperception Test), are particularly susceptible to this problem. Cronbach (1956), lent credence to this belief when he concluded that "the reason why validation troubles are encountered is that assessors must make hazardous inferences" (p. 173). Wing (1968) remarked: "One can tell more about the psychologist than about the client from reviewing protocols and assessments based on projective techniques" (p. 334). Wing (1968) is also of the opinion, however, that projective techniques used in conjunction with other measuring devices can help to develop profile that have predictive value.

The application of the psychoanalytic approach to the study of sport personology has not been extensively practiced in North America. Except for the work of Arnold Mandell (1976), Dorcas Susan Butt (1976), Arnold Beisser (1977), and Bruce Ogilvie and Thomas Tutko (1966) few studies have been reported. In contrast, European sport psychologists and psychiatrists working with athletic teams utilize the psychoanalytic model a great deal. This difference in emphasis is largely due to Freud's early work in Europe and the general acceptance of the clinical rather than the experimental model. Perhaps Marlin Makenzie's new clinical sport psychology program at Columbia University will produce scholars who can apply the psychoanalytic approach.

#### The Behavioral Method

Behaviorism, the second great force, has had a profound effect on almost all aspects of psychology (Maddi, 1972). It is, however, less concerned with the personality domain than with other areas of psychology. Berlyne (1968 , p. 638) spoke to this point when he said. "It can hardly be overlooked that problems of personality have figured much less prominently in the writings of the behavior theorists than in psychological literature as a whole." The differing emphases of behaviorism and personality may have contributed to the lack of attention given to personality assessment.

When behaviorists have studied personality, their approaches to testing focus on the careful measurement of specific behavior in relation to systematic changes in stimulus conditions (Mischel, 1976). But behaviorists have little to say about individual differences, the major subject matter of personality. Instead, behaviorists try to formulate general laws stating invariant relationships between stimuli and responses. It is not surprising then that sport psychologists have usually avoided behavioristic explanations of athlete behavior. Instead,

attention to individual differences of sportsmen/sportswomen have characterized the works of contemporary sport personologists.

B.F. Skinner (1974), a radical behaviorist, utilized an extreme environmental approach to describing personality when he said: "A self or personality is at best a repertoire of behavior imported by an organized set of contingencies" (p. 149). In Skinnerian terms, the athlete's personality is the product of the rewards and punishments she has received. Generalizing further, Skinner would say that if we are interested in determining what a particular player was really like, we would have to have seen him before his behavior was subjected to the action of the environment. Genetic endowment is recognized but Skinner contends that it does not play a major role in shaping personality until the individual has been exposed to environmental forces. In a word, personality like other aspects of behavior is learned.

Broadly defined, behavioral assessment of personality include verbal reports of feelings and thoughts or the checking of answers on a questionnaire. However, radical behaviorists ignore internal thought processes and concentrate exclusively on actions and motor performance variables which are observable from outside the person (Sunberg, 1977). When verbalizations are used, they are associated with what a person does - not just her reported thoughts and feelings. And, as might be expected, verbalizations and overt behaviors do not always correlate highly. For example, many people say that physical fitness is important but few actually exercise. Generalizations such as this led Watson (1913) and other early behaviorists to assert that psychology should be defined as the science of behavior rather than the study of the mind. Midgley (1978), a philosopher, offered a more contemporary explanation of the role of thought processes when she said: "It is not unscientific

to talk about feelings. What is unscientific is being unduly influenced by them " (p. 106).

There are several problems associated with the utilization of behavioral approaches to the study of personality. Although it is difficult to generalize considering the enormous scope of observations that are made, there is disagreement as to whether the environment in which observations are made is appropriate. That is to say, do laboratory settings provide useful data about personality? Cattell (1959) spoke to this point when he said:

"There are two objections to the manipulative experimental design in the field of personality. The first is that you ought not to do it, and the second is that, if you throw ethics aside and proceed, the artificial insult of the experiment may create a situation quite different from the naturally occurring one." (pp. 44-45).

It is far better, Cattell contends, to let life itself make the experiments. Wing (1968) suggests that the predictive validity of behavioral measures may be improved by developing conformity between the measurement environment and the criterion environment. The greater the similarity between the two environments, the more likely of achieving high empirical validity. If we are to apply this approach to sport, we should measure personality of athletes in the same environment as the situation in which we would like to predict their behaviors.

Other problems associated with behavioral measures are control of observer bias, the definition of meaningful segments of behavior to observe and determination of its significance to personality assessment (Wing, 1968). In an excellent critique of action strategy, Fiske (1978) concludes that the direct observations of behaviors have many desirable features. However, they are not method-free. As in any other approach, the researcher must determine whether aspects of her methods are biasing her findings and interpretations (Fiske, 1978). There is also the assertion that actions are trivial or are not as significant as other cons-

trials of behavior.

### The Cognitive Approach

Psychoanalysis and behaviorism so dominated American psychology from World War I to the 1960's that Cognitive processes were almost entirely ignored. Although Piaget's studies of cognitive development were well-known, it was not until the advent of the computer that attention was again focused on the importance of cognitive psychology. Neisser (1976) described this relationship well when he said: "Not only does the computer allow one to conduct experiments more easily or analyze data more thoroughly but it was because the activities of the computer itself seemed in some ways akin to cognitive processes." (p. 5). Described by Neisser as the activity of knowing, cognition is defined as the acquisition, organization, and use of knowledge. Out of this focus grew the information processing models that are popular at this time. Tracing the flow of information through the system (i.e., the mind) became a paramount goal of the new field. Today, Neisser (1976) contends that the study of information processing has momentum and prestige.

Behaviorism is said to have beheaded the organism. Cognitive psychologists contend that man is unique from all other forms of life since he has a highly developed brain that enables him to conceptualize and solve problems. Therefore, approaches to personality which do not involve the study of cognitions or the way man uses his brain to control his environment are inappropriate. In brief, cognitive psychologists, such as George A. Kelly, study the way individuals perceive, interpret, and conceptualize events and the environment. In this system, as mentioned above, man is viewed as a scientist who uses her brain to predict

events. In brief, the study of personality is holistic with an emphasis on concept formation.

Despite its current popularity, however, cognitive psychologists must make a greater effort to understand cognition as it occurs in the real world. At the present time, cognitive approaches to personality are lacking in ecological validity. In brief, they have little to say about what people do in culturally significant situations (Neisser, 1976).

Cognitive approaches require that man be viewed as a scientist rather than a beast or object. This thought is expressed by Kelly (1955) and J.S. Bruner (1956) in their cognitive theories of personality. Kelly's theory of constructive alternativism suggests that it is not nearly as important to know what pushes and pulls impinge upon man as it is to know what and how he thinks about these pushes and pulls. Kelly's Role Construct Repertory Test (RCRT) measures the subject's ability (and willingness) to report the important determinants of her behavior. In brief, Kelly's view of man is that he is governed by thoughts and perception rather than by the pushes and pulls of drives and stimuli.

The use of a cognitive approach to study attentional and interpersonal style of athletes is best described by Nideffer (1976a;1977). His 144 item paper and pencil test (TAIS) may be used to obtain information about the athlete's ability to control those attentional and interpersonal factors which have been found to be related to effective performance in competitive athletics. For example, Nideffer (1976b) contends that quarterbacks should have a broad external attentional style so that they can see their receivers in the open field.

The TAIS (Test of Attentional and Interpersonal Style) was developed in response to professional criticism of previously existing instruments.

It appears to have good test-retest reliability and good predictive and construct validity (Nideffer, 1978a). Not only has Nideffer (1978b) developed the TAIS but he and Sharpe have produced guidelines for the reduction and control of anxiety. Their system of attention control training (ACT) will become an important tool for the clinical sport psychologist working with highly anxious athletes.

Despite the significance of Nideffer's contributions, cognitive approaches to the study of athletes is not without its problems. Most pressing is the verification of "in-head" self reports that drew so much criticism in the Wundtian era.

#### Proposed strategies for sport personality research

Having reviewed briefly some of the methodological and paradigmatic problems associated with the assessment of personality from the psycho-analytic, behavioral and cognitive positions, the question may be asked: What directions should sport personology take? Should the trait approach be abandoned altogether as Kroll (1970), Fisher (1977), Rushall (1975), Martens (1975) and Singer et al (1977) have suggested? Or, should Morgan (1978) and Kane's (1978) belief that traits are alive and well be adopted? And, if the person by situation model is to be used, how are environments to be classified and assessed. Furthermore, are not persons integral parts of situations? If they are, how is the behavioral variance attributed to the person be separated from the variance contributed by the situations? Quite obviously, these and other important questions need to be answered if viable approaches to personality are to be found.

Within the larger domain of psychology, there are supporters of both positions. Fiske (1978), Mischel (1977), Bem (1972), Endler and

Block (1977) and others have, in general, supported the classical trait models.

In addition to the interaction and trait approaches, there are a number of alternative strategies that need to be considered. Fiske (1978), for example, has developed a number of alternative research choices that he feels will help move the personality field toward becoming a science. He raised the question posed earlier: "...to what extent can the approach that has proved so successful in the natural sciences be used in the behavioral sciences?" (p. 176). His thesis is that the best hope for understanding personality phenomena is to identify the critical features of the approach in the natural sciences and apply them as fully as possible to the behavioral sciences.

Fiske's position is antithetical to Finkelman's (1978) premise, mentioned earlier, that personality is a unique field requiring its own scientific approach. Although accepting the uniqueness of man, Fiske argues that this uniqueness does not necessarily require methods and standards specific to that enterprise. In brief, Fiske suggests that personologists must work within the code of science.

In addition to becoming more scientific, others suggest that we should try a different theoretical view. In general, this is the position taken by the Rushallians who want sport psychology to adopt the interactionist model. Although this approach makes sense intuitively, it is not without problems. For example, environments need to be defined and measured but how do we determine how situations are perceived and interpreted by the person. The investigator's conceptualization may not agree with the person's perception. Some have argued that the use of self-

a return to the Wundtian era of introspection.

Another direction which sport personality might take is to utilize statistical procedures which will tease-out the answers to some of our most pressing problems. Along these lines, Fisher (1978) has developed a multidimensional scaling procedure for the analysis of sport personality data. According to Fisher, his model offers the advantage that both individual subject data and groups of subjects data are revealed in the analysis simultaneously, without either analysis restricting the other.

Despite the problems associated with the psychoanalytic, behavioral and cognitive approaches, I do not advocate abandoning them. Perhaps all three types of assessment should be used concomitantly to see if there are areas of agreement. However, the use of mental observations found in the psychoanalytic and cognitive positions will not meet the cannons of science. They will not, according to Fiske (1978) lead to the formation of a science of human behavior.

REFERENCES

- Alker, H.A. Beyond ANOVA psychology in the study of person-situation interactions. In D. Magnusson & H.S. Endler (Eds.), Personality at the Crossroads: Current issues in interactional psychology. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1977.
- Beisser, A. The madness in sport. (Second Edition). Bowie, Maryland: Charles Press, 1977.
- Bem, D.J. Constructing cross-situational consistencies in behavior: Some thoughts on Alker's critique of Mischel. Journal of Personality, 1972, 40, 17-26.
- Berlyne, D.E. Behavior theory as personality theory. In E.F. Borgatto & W.W. Lambert (Eds.), Handbook of personality theory and research. Chicago: Rand McNally, 1968.
- Block, J. Advancing the psychology of personality: Paradigmatic shift or improving the quality of research. In D. Magnusson & N.S. Endler (Eds.), Personality at the crossroads: Current issues in interactional psychology. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1977.
- Bruner, J.S. A cognitive theory of personality. Contemporary Psychology, 1956, 1, 355-358.
- Butt, D.S. Psychology of sport. New York: Van Nostrand Reinhold, 1976.
- Cattell, R.B. Foundations of personality measurement theory in multivariate experiment. In B.M. Bass & I.A. Berg (Eds.), Objective approaches to personality assessment. Princeton, New Jersey: D. Van Nostrand, 1959.
- Dickinson, J. A behavioral analysis of sport. Princeton, New Jersey: Princeton Book Co., 1977.
- Endler, N.S. & Hunt, J. McV. Generalizability of contributions from sources of variance in the S-R Inventories of Anxiousness. Journal of Personality, 1969, 37, 1-24.
- Endler, N.S. & Magnusson, D. (Eds.), Interactional psychology and personality. Washington, D.C.: Hemisphere, 1976.
- Epstein, S. Traits are alive and well. In D. Magnusson & N.S. Endler (Eds.), Personality at the crossroads: Current issues in the interactional psychology. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1977.
- Eysenck, H.J. Psychology is about people. LaSalle, Illinois: Open Court, 1972.

- Finkelman, D. Science and psychology. American Journal of Psychology, 1978, 91(2), 179-199.
- Fisher, A.C. Sport personality assessment: Fact, fiction, and methodological re-examination. In R.E. Stadulis (Ed.), Research and practice in physical education. Champaign, Illinois: Human Kinetics, 1977.
- Fisher, A.C. Multidimensional scaling of sport personality data: An individual difference approach. Manuscript submitted for publication, 1978.
- Fiske, D.W. Measuring the concepts of personality. Chicago: Aldine, 1971.
- Fiske, D.W. Strategies for personality research. San Francisco: Jossey-Bass, 1978.
- Garfield, S.L. The clinical method in personality assessment. In J.W. Wepman, & R.W. Heine (Eds.), Concepts of personality. Chicago: Aldine, 1963.
- Hogan, R., De Soto, C.B. & Solano, C. Traits, tests and personality research. American Psychologist, 1977, \_\_, 255-263.
- Kane, J.E. Personality research: The current controversy and implications for sport studies. In W.F. Straub (Ed.), Sport Psychology: An analysis of athlete behavior. Ithaca, New York: Movement Publications, 1978.
- Kelly, G.A. The psychology of personal constructs. New York: Norton, 1955.
- Kroll, W. Current strategies and problems in personality assessment of athletes. In L.E. Smith (Ed.), Psychology of motor learning. Chicago: Athletic Institute, 1970.
- Liebert, R.M., & Spiegler, M.D. Personality: Strategies for the study of man (Revised Edition). Homewood, Illinois: The Dorsey Press, 1974.
- Maddi, S.R. Personality theories: A comparative analysis (Revised Edition). Homewood, Illinois: The Dorsey Press, 1972.
- Magnusson, D., & Endler, N.S. (Eds.), Personality at the crossroads: current issues in interactional psychology. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977.
- Mandell, A.J. The nightmare season, New York: Random House, 1976.
- Martens, R. The paradigmatic crises in American sport personology. Sportwissenschaft, 1975, 5, 9-24.
- Midgley, M. Beast and man. Ithaca, New York: Cornell University Press,

- Mischel, W. Toward a cognitive social learning reconceptualization of personality. Psychological Review, 1973, 80, 252-283.
- Mischel, W. Introduction to personality (Second Edition). New York: Holt, Rinehart and Winston, 1976.
- Mischel, W. On the future of personality measurement. American Psychologist, 1977, 32, 246-254.
- Morgan, W.P. Sport personology: The credulous skeptical argument in perspective. In W.F. Straub (Ed.), Sport psychology: An analysis of athlete behavior. Ithaca, New York: Movement Publications, 1978.
- Neisser, U. Cognition and reality. San Francisco: W.H. Freeman, 1976.
- Nideffer, R.M. Test of Attentional and interpersonal style. Rochester, New York: Behavioral Research Applications Group, 1977.
- Nideffer, R.M. Test of attentional and interpersonal style. Journal of Personality and Social Psychology, 1976a, 34(3), 314-404.
- Nideffer, R.M. The inner athlete: mind plus muscle for winning. New York: Thomas Y. Crowell, 1976b.
- Nideffer, R.M. Validity, reliability, and utility of the test of attentional and interpersonal style. Rochester Research Applications Group, 1978a.
- Nideffer, R.M., & Sharpe, R.C. A.C.T.: Attention control training. New York: Simon and Schuster, 1978b.
- Nye, R.D. Three views of man. Monterey, California: Brooks/Cole, 1975.
- Ogilvie, B. Problem athletes and how to handle them. London: Pelham, 1966.
- Rushall, B.S. Alternative dependent variables for the study of behavior in sport. In O.M. Landers (Ed.), Psychology of sport and motor behavior II. University Park, PA: College of Health, Physical Education and Recreation, Pennsylvania State University, 1975.
- Sechrest, L. Personality. In M.R. Rosenzweig & L.W. Porter (Eds.), Annual Review of Psychology (Vol.27). Palo Alto, California: Annual Reviews, 1976.
- Singer, R.N., Harris, D., Kroll, W., Martens, R., & Sechrest, L. Psychological testing of athletes. Journal of Physical Education and Recreation, 1977, 48(5), 30-32.
- Skinner, B.F. About behaviorism. New York: Alfred A. Knopf, 1974.

- Watson, J.B. Psychology as the behaviorist views it. Psychological Review, 1913, 20, 158-177.
- Wiggins, J.S. In defense of traits. Paper presented at the 9th annual symposium on the use of the MMPI, Los Angeles, February 28, 1974.
- Wing, C.W. Measurement of personality. In D.K. Whitla (Ed.), Handbook of measurement and assessment in behavioral sciences. Reading, Massachusetts: Addison-Wesley, 1968.