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THE DEVELOPMENT AND VALIDATION OF A SPORT ASSERTION SCALE

by

Jacqueline Ann Dailey

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APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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The broad purpose of this study was to develop and validate a self-administered situation-specific assertion scale for collegiate male and female competitive athletes. More specifically, the investigation sought to identify the relationships among an athlete's assertiveness as measured by the Dailey Assertion Scale, teammates' evaluations of her/his assertiveness, and the coach's assessment of the athlete's assertiveness. Secondly, the relationship between an athlete's scores on the DAS and on a general assertion scale (Galassi et al., 1974, CSES) was investigated. Finally, in light of the above, the research was designed to reveal whether or not the DAS was a valid instrument for the assessment of sport assertion.

Procedures for the development of the DAS involved generating a pool of 60 items which were presented to five experienced judges. Items were evaluated with respect to whether or not they had the potential to contribute to the scale; each item response alternative was ranked in the order of desirability. As a result of these judgments, 20 of the initial items were eliminated from the pool. Next, an average intercorrelation using the z' transformation was computed to determine interjudge reliability on the remaining items. The average intercorrelation of the response alternatives for an item had to be .700 or better to be further retained on the scale. This criterion was not met by five items. Eleven of the remaining 35 items yielded negative intercorrelations; these, too, were eliminated. The average intercorrelation for the 24 accepted items was .839. Six filler items were added to the 24 selected items totaling

30 items in the final scale. The DAS, The CSES, The Marlowe-Crowne (1960) Social Desirability Scale, and a player/coach rating scale were administered to 74 male and female intercollegiate athletes and their coaches at the University of North Carolina at Greensboro during the school year of 1977-1978.

Three analyses were carried out to determine item discrimination for the DAS: (a) an item analysis on the upper/lower 27% of the sample, (b) a discriminant function analysis on the upper/lower 33% of the sample, and (c) a Pearson product-moment correlation on all 74 subjects. Fourteen items were strong on at least two of the three analyses; items which were acceptable on only one analysis were eliminated for consideration in the final scale.

An analysis of variance procedure was utilized to evaluate the reliability of the DAS as a measurement tool and to assess the internal consistency of the scale items. The reliability of the scale was .409 and items were internally consistent at an r of .941.

Content validity of the DAS was assumed. However, concurrent, convergent, and discriminant validations were assessed utilizing an intercorrelational matrix of all possible pairings of the five variables under study. In addition, a multiple regression analysis was employed. These analyses revealed that no relationship existed between how a competitor viewed her/his competitive assertion and how others viewed her/his assertive behavior. There was a significant and moderate correlation between how the coach and teammates rated an athlete's assertive behavior. A significant but low relationship was found between respondent's scores on the DAS and their scores on the CSES.

With respect to validity, analyses did not yield clear results. The DAS was established as having content and concurrent validity. Furthermore, it was found to be independent of social desirability. However, analyses did not establish convergent validity, nor discriminant validity with constructs from the same substantive area.

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CHAPTER I

INTRODUCTION

The competitive nature of sport requires assertive behaviors from its participants and especially from those desirous of success. Many coaches and researchers use the terms "assertion" and "aggression" interchangeably. Such a practice confuses the meaning of an already complex concept. The ambiguity inherent in the concept of aggression may in part be traced to theories of its origins. Belief systems about human behavior not only influence responses to that behavior, but also may become self-fulfilling prophecies (Lefkowtiz, Eron, Walder, and Huesmann, 1977).

Because aggressive behavior in our society tends to have negative connotations, an "undesirable" value interpretation accompanies much of the literature on aggression. Fortunately, the very nature of the sport setting requires that individuals keep their aggressive behaviors confined to the rules and specific conditions (Cratty, 1973). Assertive behavior, on the other hand, implies a positive and desired skill which is not acquired at the expense of others. In fact, as the term is commonly used in the psychological literature, it might best be understood "as the antithesis of inhibited behavior" (Rathus, 1975, p. 9).

Berlin (1974) suggested that because words like violence, hostility, and assaultiveness are affect-linked words, fine distinctions need to be made within as well as external to the sport environment. Harris (1973),

too, stressed the idea that agreement on the definition of aggression in sport was essential before an understanding is reached on the part aggression might play in sport. Wyrick (1972) was probably one of the first researchers in sport psychology to posit this question, "how might those responses which constitute acts of aggression and hostility be differentiated from responses of forcefulness, assertiveness, and achievement motivation" (p. 545)?

If one adopts an extremely broad definition, the distinction between "assertive" and "aggressive" behaviors in human beings is blurred. If, however, one is specific, the meanings are clear. To be assertive is to express one's self openly and directly, while to be aggressive implies some type of behavior involving an element of pain, injury, or destruction which often invites counterattack (Gentry, 1975). Larsen (1976) stated that appropriate self-control referred to the balance between assertion and the inhibition of aggression which meant that individuals usually inhibited their aggression except when provoked beyond endurance. At a 1972 sport psychology meeting, the best qualification that could be designated by those present was "good" and "bad" aggression. "Good" aggression was that type of assertiveness, dominance, and taking-charge attitude which contributed to success in competitive sport. "Bad" aggression was considered to be harmful behavior frequently associated with contact sports where physical injury to one's opponent might be part of the goal of the participants (Harris, 1973).

Not only is definition a problem in the study of competitive assertion in the sport environment, measurement is an equally perplexing

task. Cratty (1973) proposed that the most successful manner of evaluating aggression in sport was to employ a combination of observation, projective, and objective tests; the most valid index, he pointed out, would probably be a coach's observation of an athlete's need and willingness to aggress in a game. Kroll (1970) called for the development of specific assessment techniques capable of accounting for behavior in the unique competitive sport situation rather than relying upon general personality assessment techniques.

Examples of specific assessment techniques for measuring aggression in sport are reflected in situation-response scales of athletic aggression. Bredemeier (1975) constructed an athletic aggression inventory (BAAGI) to assess reactive and instrumental aggression in New England intercollegiate female athletes. Collis (1972) devised an Athletic Aggression Scale to assess 10-year-old and under to 18-year-old male athletes in three separate categories: (a) overall athletic aggression, (b) legal aggression, and (c) extralegal aggression. To date, there have been no situation-response scales developed for the measurement of competitive assertion in sport. A recent study by Passmore (1977) has been reported in which she used a general assertion scale to measure the level of assertiveness of female intercollegiate athletes in comparison to college women in general.

The range or degree of assertion in sport was described by Cratty's (1973) scale of aggressive behavior which depicted the following: (a) sports where direct physical contact is encouraged, (b) limited aggression in other activities where players must aggress but rules limit direct contact, (c) indirect aggression against opponents, (d) aggression

directed only against objects, and (e) those sports which do not require any observable aggression either against an opponent or the environment. Cratty reminded us that most sports calling for direct expressions of aggression are participated in by young boys and male adults. At the time Cratty made the above remark American society did not condone aggression in women's sports. Possibly the picture is changing now. The view Boslooper (1976) emphasized was that there can and should be physically assertive activity in contact sports between female and female and between male and female which is nonsexual and nonhostile in nature. He based this idea on the premise that physically assertive activity is basic to individual health as well as to the health of society.

The above discussion calls attention to three needs for the study of assertive behavior in sport. First, it is important to ascertain exactly what is being measured—vigor or violence. Secondly, the assessment tool should reflect the sport-specific situation rather than generalized factors. Finally, the broad range of assertive behaviors which are characteristic of sport for both men and women must be accommodated. Acknowledgment of these challenges was influential in the conceptualization of the present study.

The Problem

The broad purpose of this study was to develop a paper-and-pencil self-report assertion scale which was situation specific for collegiate male and female competitive athletes. The inquiry further sought to test the application of the scale to determine whether obtained scores reflected actual assertive performance of the competitors involved.

More specifically, the research sought to answer the following questions:

1. What are the relationships among an athlete's assertiveness as measured by the Dailey Assertion Scale (DAS), teammates' evaluations of her/his assertiveness, and the coach's assessment of the athlete's assertiveness?

2. What is the relationship between an athlete's scores on the DAS and her/his scores on a general assertion scale?

3. In the light of 1 and 2 above, is the DAS a valid instrument for the assessment of sport assertion?

Definitions

The following terms were defined for use in this study.

Aggression. An intentional response one makes to inflict pain or harm on another (Alderman, 1974) with an expectation greater than zero of succeeding (Kaufmann, 1970).

Assertion. An open and direct expression of one's self that excludes aggression. A dominant and taking-charge attitude which contributes to success in competitive sport and is desirable.

Attitude. A relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner (Rokeach, 1968).

Competitive assertion. A situation-specific construct which describes an athlete's willingness to assert her/himself in varying competitive sport settings. Its development is based on evidence that situation-specific assertion is a better predictor of behavior in the particular settings for which the construct was designed (Martens, 1977).

Dailey Assertion Scale. A situation-specific scale developed for the purpose of providing a reliable and valid paper-and-pencil self-report instrument for measuring male and female intercollegiate competitors' willingness to assert themselves in the sport setting.

General assertion scale. The Galassi, DeLo, Galassi, and Bastien (1974) College Self-Expression Scale (CSES). A 50-item, self-report measure of assertion utilizing a five-point Likert format (0-4) with 20 positively and 30 negatively worded items which attempts to measure three aspects of assertiveness: positive, negative, and self-denial.

Interactional paradigm. A research approach in which the behavioral effects of environment and individual difference variables (dispositions), and their interaction are concurrently studied (Martens, 1977).

Player/coach evaluation. A modification of Bredemier's (1975) reactive athletic aggression scale by the investigator to fit the definitional framework of the present study. A 10-item instrument which describes an athlete's willingness to assert her/himself from the player/coach's viewpoint utilizing a five-point (5-1) format from "almost always" to "never" to generate a summation value.

Situation response. A type of attitude scale item in which a situation is briefly described and five alternative responses are given. Responses represent different degrees of attitude toward a situation. The subject is to select the response which best indicates what he/she would do if faced with the situation (Zelfer, 1971).

Social desirability scale. The Marlowe-Crowne Social Desirability Scale (SDS) is a 33-item self-report instrument which assesses the common response set of social desirability and utilizes a true-false format

(Crowne & Marlowe, 1960). Of the 33 items, 18 are keyed true and 15 false, making a response set interpretation of scores highly improbable. Social desirability refers to the need of subjects to obtain approval by responding in a culturally appropriate and acceptable manner.

Sport assertion. A particular activity characterized by certain organization, rules, and physical skills.

Assumptions

In conceiving this study, the investigator accepted the following assumptions:

1. Assertive attitudes pertaining to competitive sport performance can be described in situation-specific statements.

2. Evaluations obtained in the ranking of responses by judges reflect expertise and experience with respect to necessary and desired assertive behaviors in the sport setting.

3. Athletes selected as subjects respond as they believe they would behave in the situations described.

4. A respondent's range of choices encompasses her/his real preferences.

5. Player/coach ratings are acceptable indices of assertiveness in sport.

Scope

The Dailey Assertion Scale was designed to assess the competitive assertiveness of 74 undergraduate intercollegiate athletes, 19 of whom

were male and 55 of whom were female. The male subjects represented members of four teams and their coaches. Female subjects and their coaches were affiliated with seven teams. Because of factors specific to the population universe from which the respondents were identified, the study does not seek to generalize results to all intercollegiate athletes and their coaches.

The following types of occurrences from sport served as a guide in the development of scale items: (a) those of direct assertion, (b) limited assertion, (c) indirect assertion, (d) assertion only against objects or apparatus, and (e) those where no observable assertion against opponents or objects was observed. Other areas identified in the social psychology literature were also helpful. Among them were: (a) refusing unreasonable requests, (b) receiving the compliments of others, (c) freely expressing one's attitudes, opinions, and values, (d) taking the responsibility for one's actions, and (e) appropriately standing up for one's rights.

Judges used in the selections of items and determination of response weightings represented persons who were knowledgeable in skill learning and sport psychology and/or who had special competencies in teaching/coaching intercollegiate athletes, assertion research, and/or attitude research. In addition to their competencies, judges selected were willing participants.

In effect then, the following five variables were utilized in the study: (a) The Dailey Assertion Scale, (b) The Galassi et al. (1974) College Self-Expression Scale, (c) The Marlowe-Crowne (1960) Social Desirability Scale, (d) teammate ratings of an athlete's assertiveness,

and (e) coaches' ratings of an athlete's assertiveness. These data were collected during the last two weeks of the Spring semester, 1978.

Significance

Berlin (1974), Martens (1975, 1977), Kroll (1970), and Rushall (1970) encouraged the systematic study of assertion as a phenomenon in order to contribute to our understanding of physically active human beings rather than researching athletes' personality traits. Harris (1973) cautioned that "because an individual is able to meet the proposed demands of a specific situation does not indicate that this behavior is typical of every situation" (p. 90). Thus, the study of assertive behavior from a trait or situation approach is limited. Assertive behavior needs to be studied from a broad perspective with alternative behavioral responses so an understanding of all expressions of such behavior can be gained (Bardwick, 1971). Sport is no exception. In fact, it provides a controlled environment which is conducive to such inquiry.

Since assertive behavior is assumed to be a necessary component of successful sport performance, an understanding of how a competitor views her/his assertiveness in sport is important. The Dailey Assertion Scale was designed therefore to measure an athlete's willingness to assert her/himself in the competitive sport setting. It utilizes a research strategy which acknowledges interactions occurring in sport; it permits the study of patterns of reactions across situations. If a competitor's scores on this scale do, in reality, reflect "real" assertive performance, then the tool offers coaches a technique for better

understanding and interacting with individual athletes.

CHAPTER II

REVIEW OF RELATED LITERATURE

This survey presents a comprehensive review for this study in two broad areas; it is not intended as an exhaustive review of the published literature on assertion and its measurement. The first section addresses the definition of assertion and aggression. It also offers a summary of paper-and-pencil measures of assertion on college populations from the social psychology literature. The second main section, entitled "objective measurement," reviews selected measurement issues, e.g., situation-response scales, situation-response scales measuring attitudes in physical education, situation-response scales measuring athletic aggression, and ratings of aggression in sport.

Assertion

Assertion and aggression. "Was that assertive or was that aggressive?" Such a question cannot be simply answered. A particular act may be: (a) assertive in behavior and intent--e.g., one desired to and did express her/his feelings; (b) aggressive in effect--e.g., an opponent could be harmed by one's assertion; and (c) nonaggressive social context--e.g., athletes are expected to be low-keyed away from the competitive sport setting. These mutually exclusive classifications may not be reconciled. As Alberti (1977) stated, "The issues are complex and each situation must be evaluated individually" (p. 354). He outlined

a schema in a recent paper (Alberti, 1976) which depicted minimum criteria for permission of accurate labeling of a particular act: intent, behavior, effect, and social-cultural context.

Hollandsworth (1977) attempted to differentiate the constructs in terms of threats and punishments. Responses which included the features of verbal expressions of rejection or negative evaluation and the nonverbal expression of physical threat had a high probability of being perceived or labeled as aggressive. If one expressed one's needs, feelings, preferences, or opinions in a nonthreatening, nonpunitive manner, such expression would probably be seen as assertive rather than aggressive.

Previous attempts to differentiate the two constructs have not focused on clearly defined and observable behavioral components of the response. Wolpe (1973) based his distinction on social norms in that he defined assertion as "socially appropriate" and aggression as "socially reprehensible." Alberti and Emmons (1974) also emphasized the consequences of nonassertive, assertive, and aggressive behaviors as well as acknowledging the importance of appropriate interpersonal behavior within the social context. Their primary distinction for aggressive behavior was accomplishment of end goals at the expense of others; for assertive behaviors "neither person is hurt, and unless their goal achievement is mutually exclusive, both may succeed" (p. 12). Similarly, Fensterheim and Baer (1975) defined aggression as an act against others; assertion was appropriate standing up for one's self. Hollandsworth (1977) proposed that specific, behavioral components of the response

itself, which distinguish assertive behaviors from aggressive ones, need to be identified to aid the shaping and acquisition of appropriate assertive skills.

For Rathus (1975), assertiveness is "the expression of oneself in a positive productive manner" (p. 9). It is not the synonym for belligerence or antagonism. The assertive individual may be insistent that her/his feelings are correct, but will admit to error without loss of self-esteem. Rathus identified ten types of assertive behaviors or "tasks" which he has shown (1972, 1973a) to be effective in instigating assertive behavior: (a) assertive talk, (b) expression of feelings, (c) greeting others, (d) disagreement, (e) asking why, (f) talking about oneself—deliberate use of the I, (g) rewarding others for compliments, (h) refusing to justify opinions to habitually disputatious persons, (i) looking people in the eye, and (j) purposeful performance of anxiety-provoking activities which would be productive but are neglected because of fear or anxiety.

Galassi et al. (1974) reported that the successful expression of personal feelings, values, and attitudes for college students constituted a particularly important developmental task for this population. Assertive training, an early therapeutic procedure developed by behavior therapists to aid in this expression, appears to many to be a promising procedure. Research has been slow to emerge and Galassi et al. (1974) postulated that one of the reasons for the delay has been the absence of a standardized instrument to serve as a diagnostic tool and a measure of change.

Another group of researchers has been inspired by pursuing research in assertive training for women. Butler (1976) distinguished assertion from aggression by stating that assertion involved a full expression of one's feelings and opinions; aggression went one step further to attack or intrude upon another. Shelton (1977) suggested that the main components of assertive behaviors could be divided into three separate and specific response patterns: (a) the ability to say "no," (b) the ability to express positive and negative feelings, and (c) the ability to ask for favors and make requests.

Jakubowski (1976), in her presentation of a paper to the annual conference of the American Psychological Association, examined an assertion training model and its coverage of four major stages in which participants were helped to: (a) distinguish assertion from aggression and nonassertion from politeness, (b) develop a belief system to support assertive behavior, (c) develop skills for dealing with excessive emotions which interfere with assertive behavior and other internal obstacles to assertion, and (d) develop assertive skills through active practice models. Wilk and Coplan (1977), too, stressed the clarification of assertive, aggressive, and nonassertive behaviors in their assertive training program as a confidence-building technique for women.

Rose (1975) suggested that as a person gained in social competence and learned to be appropriately assertive there was evidence that her/his anxiety was reduced. MacDonald (1975) noted that the absence of assertion was rarely a "unitary trait." Deficiencies were usually limited to particular categories of situations. Brockway (1976) proposed that

in the case of professional women, assertion training should focus more on altering certain socialization processes than on increasing overt assertiveness skills. From the results of her study, she felt that the most important issue to be resolved was whether increased assertiveness lessened anxiety, or self-perceived competence helped subjects to accomplish other professional goals.

In a review of the literature of sex-related data from self-report measures of assertion, Hollandsworth and Wall (1977) reported that assertiveness training for women has been justified on the grounds that women are generally less assertive than men or that women have unique problems in being assertive. The researchers found that males reported higher frequencies of assertive behavior than females without exception. The means were significantly different for only 4 (29%) of the 14 samples reviewed. As a result of their review they felt that this was yet another indication that the question of sex differences in assertive behavior has been largely ignored.

Hollandsworth and Wall reviewed 108 articles, based on sound methodology, 69 of which were not case studies. Of these, one-third (36.2%) used same-sex samples (N = 18 male and 7 female). Of the remaining 44 studies which used samples including both males and females, only 7 (6.5%) presented sex-identified assessment data. Following their review, the authors gave the Adult Self-Expression Scale (ASES; Gay, Hollandsworth & Galassi, 1975) to 702 male and female college students. This scale was selected because it included a wide range of response areas. The results suggested to these authors that although men appeared

to have sexually differentiated problems in assertion, homogeneous grouping by sex might inhibit the acquisition of assertiveness skills.

On a much smaller college sample (N = 49), Wyrick, Gentry, and Shows (1977) also reported marked sex differences on the following self-report measures: (a) The Buss-Durkee Hostility Inventory (1957) which measured aggression, (b) The Galassi et al. (1974) CSES which measured assertion, (c) The Bates-Zimmerman Social Constriction Scale (1971) which measured lack of assertion, and (d) The Coan (1974) Experience Inventory which measured openness to experience. They concluded that relationships among aggression, assertion, and openness to experience as measured in their study, suggested the importance of considering sex differences when investigating these variables. Aggression and assertion were related to different personality variables for males and females and might be experienced very differently by men and women.

Paper-and-pencil measures of assertion. Emphasis has been placed on the development of self-report inventories of assertiveness (Heimberg, Montgomery, Madsen, and Heimberg, 1977). According to Heimberg et al. (1977), of the 11 inventories developed to date, there is great variation in the amount of effort devoted to validation. The reasons for the difficulty in the development of valid measures for assertive behavior are due in part to the fact that (a) assertive behavior involves many simultaneously occurring verbal and nonverbal responses, (b) there has been a confusing array of behavioral, physiological, and self-report indices used as dependent measures of assertiveness, and (c) it is not clear how these indices relate to

global judgments of assertiveness (Eisler, Hersen, Miller, & Blanchard, 1975).

DeGiovanni and Epstein (1978) and Hall (1978) attributed another part of the difficulty in the development of valid measures for assertive behavior to the original conceptual model proposed by Salter (1949) and Wolpe (1954). This is the conceptual model upon which most of the subsequent study of assertiveness has been based. Neither investigator was concerned with the distinction between nonaggressive and aggressive expression. The measures used reflect the common confusion of the two constructs, since the development of assessment techniques tend to be guided by prevailing constructs regarding the characteristics or behaviors of interest (Hall, 1978). Adequate evidence of discriminant validity therefore, i.e., the ability to discriminate between aggression and assertion, is lacking for all the self-report measures evaluated (DeGiovanni & Epstein, 1978).

Hersen and Bellack (1976) cautioned that while it is typical to correlate social behavior measures with other established scales as validating evidence, the difficulties are twofold: (a) self-report measures are subject to biases relating to how individuals would like to present themselves on questionnaires, and (b) while correlations between self-report measures may be high, the ability of these measures to predict an individual's behavior in specific situations may often be very low. Considering the situation-specific nature of social behavior (Hersen & Bellack, 1977), subjects should not be expected to have equal difficulty in all situations.

The first test developed for the purpose of evaluating assertive behavior was the Wolpe-Lazarus Assertiveness Questionnaire (1966). Unfortunately, no test-retest reliability or standarized procedures were undertaken to validate the test. It has been reported by McFall and Marston (1970) that the test discriminates between unassertive college students and normals. Eisler, Hersen, and Miller (1973) stated that high and low assertive subjects, dichotomized according to behavioral measures, differed significantly in their response to the Wolpe-Lazarus Questionnaire. Lazarus (1971) emphasized that the items on the questionnaire may not tap each subject's idiosyncratic areas of nonassertion since it deals with common social situations. This questionnaire has served as a major source of items for the Galassi et al. (1974) CSES and the Rathus (1973b) Assertiveness Scale.

Of late, a number of paper-and-pencil measures have been developed for college students. These include: (a) The Assertive Inventory (Lawrence, 1970), (b) The Constriction Scale (Bates & Zimmerman, 1971), (c) The Conflict Resolution Inventory (McFall & Lillesand, 1971), (d) The Assertiveness Schedule (Rathus, 1973a, b), (e) The College Self-Expression Scale (Galassi et al., 1974), and (f) The Assertion Inventory (Gambrill & Richey, 1975). Evaluative comments made by Bodner (1975), Lange and Jackubowski (1976), Hall (1978), and DeGiovanni and Epstein (1978) enable one to make more educated decisions about which of these measures to use.

The Bates-Zimmerman scale has not often been used in assertive training research because of its specific approach—to indicate inappropriate nonassertion. It has extensive statistical and conceptual

analysis. But according to Lange and Jakubowski (1976) and Hall (1978), the instrument still needs additional cross-validation and normative data.

Although the Lawrence scale has been used in several assertion training studies, some disadvantages are obvious: (a) obtained scores seem significantly influenced by social desirability, and (b) the scale takes longer to complete than the average 24 minutes for college students. Both the Lawrence Assertiveness Inventory and the Galassi et al. (1974) CSES have low concurrent validity correlations (.30).

McFall-Lillesand's Conflict Resolution Inventory is methodologically sound; scores on this paper-and-pencil measure of refusal behavior are highly related (.82) to actual behavior on a behavioral situations test (Loo, 1971). There have been no direct validation studies on the CRI (Hall, 1978) and this inventory has questionable discriminant validity as the authors do not present sufficient evidence that the scale is free of confounding with aggression (DeGiovanni & Epstein, 1978).

The Rathus Assertiveness Schedule has been used in several research studies, but it, too, has a significant relationship with social desirability. Additionally, Rathus (1973a) reported a moderate correlation (.34) with assertiveness as measured by relating subjects' assertion test scores with friends' ratings of their behavior on a factor-analyzed scale. Rathus' instrument reports a .70 concurrent validity correlation. Visual inspection of the Rathus scale suggested, however, that several of the items appear to measure aggression rather than assertive behavior, e.g., "There are times when I look for a good vigorous argument" (Lange & Jakubowski, 1976, p. 284).

The College Self-Expression Scale developed by Galassi and his colleagues (1974) is one of the most widely used devices for assessing assertiveness (Hall, 1978). While the CSES appears to be unrelated to aggression as measured by a subscale of the Adjective Check List (Galassi et al., 1974), DeGiovanni and Epstein (1978) emphasized that the authors' conclusion that the CSES is not confounded with aggression receives only equivocal support. Galassi and Galassi (1975) reported a nonsignificant relationship between the scores on their CSES and total scores on the Buss-Durkee scales; their unpublished data (Galassi & Galassi, 1976) included significant correlations between the CSES and the Buss-Durkee assault and negativism subscales for male subjects (DeGiovanni & Epstein, 1978). The CSES was not found to be influenced by social desirability ($r = .18$), according to Lacks and Connelly (1975).

Gambrill and Richey (1975) are presently standardizing their Assertiveness Inventory, but no published norms or detailed descriptions are available (Bodner, 1975). The authors fail to distinguish between assertive responses and aggressive attempts to hurt or coerce another (DeGiovanni & Epstein, 1978). Hall (1978) supported the use of the scale as it provided a great deal of information to the user and allowed for the development of profiles based on assertiveness and felt anxiety. He stressed that the inventory did require additional validation research in terms of behavioral measures to increase its value.

In summary, item analyses have been reported on only one instrument (Rathus, 1973b). Little effort has been made to assess differences in

discriminative power among situations (Heimberg et al., 1977). Many inventories contain redundant, irrelevant, or unnecessary items and the roles of response set and social desirability have yet to be evaluated.

The College Self-Expression Scale appears to be the most useful for measuring a wide variety of different types of assertive behaviors. But while the CSES purports to evaluate assertive skills in a variety of situations, it does not allow for an orderly breakdown of these skills according to the situation (Bodner, 1975). The Conflict Resolution Inventory is an excellent measure of one type of assertive behavior (Lange & Jakubowski, 1976; Bodner, 1975). None of these measures has a separate scale to measure aggressive behavior and all were normed on a white population. This leaves additional work for the aforementioned investigators in further refining their instruments.

Objective Measurements

Attitude measurement. The need for objective measurement instruments which can be administered to large groups led to the development of attitude scaling techniques. These are technically superior to questionnaires because they provide a quantitative method for assessing an individual's relative position along a unidimensional attitude continuum. The direction and intensity of a respondent's attitude is indicated by a single score which summarizes one's responses to a series of items each related to the single concept, object, or issue under study. The major difference between a scale and a test is that individuals taking a scale respond in terms of their feelings about individual

statements and there are no single "correct" answers. One's beliefs, opinions or feelings provide the criteria by which one judges the desired answer (Edwards & Porter, 1970).

Situation-response scales. Assuming that opinions may not be the best indicator of attitudes, Pace (1939) relied upon subjects' statements about what he/she would do in a variety of specific situations. Responses represented varying degrees of attitude concerning the situation; a situation was described and four or five alternatives were given for each. An individual then had to select the response which best indicated what he/she would do if confronted with the situation. This, of course, called for an individual to identify with the situation.

According to Rosander (1937), there are seven steps involved in constructing behavior-situation scales: (a) collecting and editing scale elements, (b) preliminary sorting, (c) final sorting, (d) scaling, (e) selecting of parallel forms, (f) determining reliability, and (g) determining validity. Reasons for using the situation-response technique have been elaborated by Pace (1939). In general, these scales can be used as teaching aids, stimulants for discussion, and as a basis for generalizing an assertive behavior in competitive sport settings. More specifically, the S-R technique purportedly obtains more truthful results because attitudes may be measured in a more subtle manner. Further, the technique aids in eliminating vagueness and generality of the statements.

An attitude inferred from the situation-response scale would be less extreme than one inferred from other measurement techniques. It is more difficult for an individual to consistently choose similar responses

on an S-R scale. Finally, results from these scales can be used to reinforce the learning of appropriate behaviors. It is speculated that advances in attitude measurement will come when researchers are able to establish clear relationships between opinion and action. Meanwhile, measurements of today are purely descriptive (Pace, 1950).

Situation-response scales to measure attitudes in physical education. A number of physical education studies have used the S-R method to measure attitudes. McAfee (1955) developed sportsmanship attitude scales for boys in grades six, seven, and eight. In 1956, Mayshark formulated an S-R scale to measure health and safety attitudes of seventh graders and Myers (1958) prepared an instrument to measure attitudes of seventh graders toward safety. A problem-solving test of sportsmanship was reported by Haskins (1960) for college men and women; in the same year, Moawad (1960) created a situation-response scale for the purpose of establishing a valid, reliable, and objective physical education attitude scale for sophomore boys in Indiana high schools. Meyne (1964) assessed the attitudes toward the profession of physical education held by college males majoring in physical education.

Seven years later, a scale to measure the attitudes of freshmen and sophomore college women toward birth defects was constructed by Zelfer (1971). Sisley (1973) measured the attitudes of women coaches toward the conduct of intercollegiate athletics for women. The most recent study using a situation-response format was conducted by Hutchison (1976). She revised Sisley's S-R scale for use with coaches of women's intercollegiate basketball teams and female intercollegiate

basketball players who were projected into a coaching role. All of these more recent studies were conducted at UNC-G.

The critique given the paper-and-pencil measures of assertive behavior by Heimberg et al. (1977) from studies in the psychological literature equally applies to the S-R attitude studies reported in physical education. Very few researchers have done item analyses. None have taken convergent and discriminant validation into account, nor have they considered any other confounding variables, e.g., social desirability in their research.

Situation-response scales measuring aggression in sport. Radford and Gowan (1970) examined sex differences as they pertained to self-reported feelings about some 51 games, sports, and other activities arranged on an aggressiveness-competitiveness scale. College physical education majors served as subjects, 85 of whom were male and 113 of whom were female. Their responses reported: (a) feelings of enjoyment, (b) desire to continue with the activity at some future time, and (c) feelings of proficiency in relation to sex-appropriate listings of activities.

These investigators were primarily concerned with activities at the extremes of the scale, the first and fourth quartiles, of response options. Their research concluded that "both males and females have more negative feelings about activities which require, encourage, or reward overt aggressiveness and highly competitive behavior than about activities that are low in aggressiveness/competitiveness" (p. 21). There was also a tendency identified on the part of women to feel more

negatively toward aggressive activities and more positively toward nonaggressive activities than the male subjects.

Questions answered by Collis' (1972) 50-item athletic aggression scale were: (a) how important winning was to a group or individual, (b) what measures subjects were prepared to take in order to achieve success, and (c) perhaps, how much these aggressive attitudes were related to success in any given sport. His pilot survey concerned 20 male participants in high level competitive programs at three age levels (10 & under, 11-14, 15-18) and four sports (ice-hockey, soccer, swimming, and gymnastics). Collis found that differences between the mean scores of sport groups were minimal; but, within the different age groups, significant changes occurred for legal aggression scores; the opposite results were reported for the extralegal scores.

More recently, Bredemeier (1975) developed and validated a self-report 200-item Likert-type scale for the assessment of athletic aggression (BAAGI) in female athletes. The scale contained 100 reactive items which described the infliction of injury on another and 100 instrumental items which connoted the attainment of an extrinsic reward. She reduced her 200-item instrument to one of 100 items using a .27 (or higher) validity coefficient criterion. The alpha scores for internal consistency were .90 for the revised reactive scale and .86 for the revised instrumental scale. A significant, negative correlation of .69 was obtained between the revised instrumental and reactive scales which the author felt added to the construct validity of her scale. These items were addressing different forms of aggression. The Buss-Durkee Hostility Scale (1957), The Marlowe-Crowne Social Desirability Scale (1960), and a

coach's evaluation were also included in Bredemeier's battery. Significant correlations were found between the Buss-Durkee items and the BAAGI, and there was a small significant effect of social desirability on the revised BAAGI responses. Instrumental aggression items were affected more by social desirability than the reactive items.

In 1977, Bredemeier tested 95 female athletes who reported significantly more reactive aggression and significantly less instrumental aggression than the 166 women tested in 1975. Twenty-three male football players were also assessed but their reactive and instrumental aggression scores were not significantly different. The male athletes' mean scores were comparable to the female athletes' mean scores on the instrumental items, but the football players reported significantly higher levels of reactive aggression than the women athletes. A factor analysis of BAAGI extracted two factors: (a) assertive emotional control which contained items associated with instrumental aggression, and (b) reactive aggression. The assertive emotional control factor accounted for the highest percentage of the explained variance and contained the major portion of BAAGI items.[1]

Rating scales measuring athletic aggression. There is a type of behavioral observation which Kerlinger (1973) termed "remembered behavior or perceived behavior." He compared rating scales, another form of objective measure of individuals as observed by others, with scales which measured how an individual saw her/himself. While the use of rating

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[1]Work in progress. Additional information not available.

scales has often been unsophisticated, they do have virtues which make them valuable tools of scientific behavioral research. Kerlinger cited one of their uses as adjuncts to other methods. Such is the use to which Bredemeier (1975) put her coaches' 10-item evaluation (CE) scale utilizing a true-false format. The Coaches' Evaluation assessed an athlete's reactive aggression from the coach's point of view. A score of ten represented a perfect reactive aggression score. The mean of the coach's evaluations was 3.68 which indicated that coaches described their athletes as displaying little reactive aggression. The alpha score (.53) reflected a significant homogeneity of items at the .01 level. The reactive items on the CE scale and revised BAAGI items reflected a significant positive relationship.

Cratty's (1973) rating scale, on the other hand, depicted varying amounts of aggressive behavior seen and experienced in sports, and was schematically presented by him as a classification device. The scale may assist one to focus upon situations in sport which might require more assertive behavior from its participants than others and also, to anticipate where aggressive rather than assertive behaviors might emerge. The writer questions whether the "fine line" between assertion and aggression depends upon the nature of the sport, the officiating philosophy, and the tolerance of one's teammates, coaches, and opponents for aggressive behavior within the rules (Cratty, 1973, p. 152-153). Cratty also encouraged the use of this scale as an objective measure for research purposes. He did not cite research of its use as a data gathering device, however.

To date, only Bredemeier's (1975, 1977) work in aggression and Martens' (1977) study of anxiety seemed to have advanced the interaction

model of S-R research in sport psychology. Both of these researchers followed sound procedures in their scale development, research design, and statistical analysis. Competitive sport assertion still awaits the efforts of a qualified researcher who will utilize the interaction model in her/his formulation of a measuring technique of the construct.

CHAPTER III

PROCEDURES

A description of the procedures followed in the development, administration, and validation of the Dailey Assertion Scale are presented in this chapter. Steps taken in the data treatment are also explained. The text is categorized in three major sections: (a) development of the scale, (b) collection of evidence, and (c) analyses.

Development of the Scale

The development of the DAS closely followed the recommendations in the American Psychological Association's Standards for Educational and Psychological Tests and Manuals (American Psychological Association, 1974). The DAS was developed for use with intercollegiate athletes; it sought to reflect the competitive sport setting. The form and style of the scale was based on several criteria: (a) an objective rather than projective scale, (b) a minimization of response bias, (c) an unambiguous procedure for taking the scale, (d) a relatively short time period to complete the scale, and (e) an easy method for scoring the responses (Martens, 1977). The format chosen was developed by Pace (1939). It utilized a self-administered situation-response scale with each item having a five-point response alternative: (a) least desirable response, (b) fourth most desirable response, (c) third most desirable response, (d) second most desirable response, and (e) the most desirable response.

These options represented varying degrees of attitude toward a situation. The subject selected the response which best indicated what he/she would do if confronted with the situation as described.

To minimize a subject's reactivity to assessing assertion, the DAS was not referred to as an Assertion Scale but one of self-expression. Six filler items were included to direct the respondent's attention to other elements of competition. The situation-response format used was considered to be minimally affected by response sets. This was accomplished by varying the order of the alternative responses and by the specific wording of the items. There is no known procedure to eliminate response bias. Because social desirability and lie scales seem to suffer from the same weakness they seek to detect, none was developed in conjunction with the DAS (Martens, 1977).

Item Development

The first task in the scale construction was to identify the subclasses of assertive behaviors which were typically delineated in everyday competitive sport settings. This served as a guide in the development of the situation-response items. A pool of items was generated from ideas about assertion expressed in the social psychology literature and from Cratty's (1973) rating scale.

Judge Selection and Their Evaluations

Once the areas were identified and the items formulated, a panel of five experienced judges qualified in sport psychology and/or skill learning were presented with a list of sixty items to be evaluated.

These persons had either conducted research on assertion in sport or were known to be knowledgeable of this topic. The panel was composed of Dr. Merna Dee Galassi, Dr. Dorothy V. Harris, Dr. Robert J. Lueft, Dr. Brent S. Rushall, and Ms. Janice Shelton. Judges were requested to rank each item response alternative in the order of desirability. Items were also evaluated as to whether or not they would contribute to the scale. The judges were instructed to disregard their own attitudes toward the situation in ranking response alternatives. If they felt they could not rank the response alternatives of a particular item on a one-to-five scale, they were directed to assign a duplicate value to two or more responses which they thought equally desirable or undesirable. See Appendix A for the initial scale items and directions to judges. The results of the judges' responses then served as the basis of item selection for the DAS. Therefore, some items were ranked by as few as three judges.

Items which met the following criteria were considered for the scale: (a) two-thirds, three of five, of the judges had to consider the item either desirable or essential, (b) the five response alternatives from each judge had to include three different rankings with at least one rank below 3 and one rank above 3, and (c) the average intercorrelation of the response rankings for the item had to be .700 or better. The value was recommended by Sisley (1973). The Spearman rank difference (rho) method of correlation was used to determine the degree to which the five judges agreed in ranking the response alternatives. The intercorrelations for all possible combinations of judges were computed on an IBM system 360 model 165 computer utilizing the

Statistical Analysis System (SAS) Program CORR SPEARMAN.

An average intercorrelation using the z' transformation was computed by averaging the 10 rho correlations for each item ranked by the five judges. Where only four judges ranked the items, there were 6 rho correlations; for three judges, there were 3 rho correlations. These rank order correlations were then transformed into z' values, averaged, and converted back to the correlation coefficient (Edwards, 1950). Since rho is an approximation of r, and the difference between the two never exceeds .018 (Barrow & McGee, 1971), the investigator considered this a negligible difference in using the Fisher transformation procedure. The mean of the average intercorrelation for the items in the scale gave indication of inter-judge reliability.

Table 1 reports the averaged z' values, and the final r averages. Of the original 60 items, 20 items were eliminated on the basis of the first two criteria: (a) three of the five judges had to consider the item desirable or essential, and (b) the five response alternatives from each judge had to include three different rankings with at least one rank below 3 and one rank above 3, so intercorrelations were run on 40 items. Of these, 5 items were eliminated on the basis of the third criterion: (c) the average intercorrelations for the response rankings of an item had to be .700 or better. Eleven items involved negative intercorrelations; these items were also eliminated because they indicated a lack of interjudge agreement. See Table A in the Appendix for the responses from the judges and the average weights for the items.

Averaged intercorrelations ranged from .357-.993. The interjudge reliability for ranking the responses on the 24 selected scale items was

Table 1

Disposition of Original Sixty Items
According to Judges' Rankings

Item	r	z'	Item	r	z'
1 a			31 a		
2 a			32 b		
3 * d			33 * ε	.835	1.206
4 b			34 * εc	.418	.482
5 * d			35 * f	.993	2.714
6 * d			36 * c		
7 * c	.357	.374	37 * d		
8 b			38 * c		
9 * d			39 * f	.918	1.571
10 * f	.712	.892	40 * f	.808	1.117
11 b			41 a		
12 b			42 * f	.829	1.182
13 *	.800	1.089	43 * d		
14 a			44 * f	.836	1.208
15 * fc	.640	.758	45 *	.757	.987
16 *	.840	1.226	46 b		
17 b			47 * fd		
18 a			48 * e	.933	1.670
19 * d			49 * f	.737	.947
20 a			50 *	.731	.930
21 *	.927	1.631	51 b		
22 * f	.787	1.061	52 * f	.963	1.981
23 *	.786	1.061	53 * f	.856	1.264
24 * f	.936	1.731	54 * d		
25 a			55 a		
26 * f	.841	1.222	56 a		
27 a			57 * e	.897	1.462
28 * f	.887	1.410	58 *	.747	.968
29 *	.783	1.051	59 b		
30 * fc	.557	.629	60 * c	.608	.707

* Selected for use in the scale
a Eliminated because each judge did not use three different rankings
b Eliminated because three of five judges did not value the item
c Eliminated because average intercorrelation was too low
d Eliminated because of a negative intercorrelation
e Three judges ranked the item
f Four judges ranked the item

computed to be .839. This coefficient indicated an acceptable a priori standard of reliability (Barrow & McGee, 1971). Six filler items were added to the 24 assertion items from the original pool. The DAS, then, as developed from the initial judgments consisted of a total of 30 items. The order of items was established from the original pool except where alternative responses might contribute to a response set. In such cases, these were arbitrarily changed to another place and instructions for subjects were developed.

Collection of Evidence

Selection of Subjects

One hundred and eleven undergraduate male and female intercollegiate athletes were invited to participate in this study on the basis of their competitive experiences at the University of North Carolina at Greensboro. Only athletes on varsity squads competing during the Fall and Spring semesters of 1977-1978 were eligible to take part in the study. This target population included the men's and women's swimming, tennis, golf, and basketball teams; the women's field hockey and softball teams; the men's soccer team.

Scale Administration

The Dailey Assertion Scale was administered to 74 volunteers of the aforementioned athletes. Subjects were directed to indicate how they would respond if placed in the situations described in the items. The Galassi et al. (1974) College Self-Expression Scale, The Marlowe-Crowne (1960) Social Desirability Scale, teammate ratings, and coach evaluations

of an athlete's assertive behavior were also included in the test battery. Each instrument included self-explanatory directions (see Appendix B), and was distributed at pre-arranged times to those athletes and coaches who consented to participate in the study. With respect to ethics for human subject research, the School of Health, Physical Education, and Recreation procedures were followed.

Administration was accomplished during the last two weeks of Spring semester in a classroom, gymnasium, or dormitory setting in accord with the subject's availability. The sequence was randomly ordered for each subject; testing sessions were of approximately one hour duration. The latter part of the competitive season was deemed a desirable time to administer the test battery because it allowed ample time for coaches and players to get to know each other. The field hockey, soccer, swimming, and basketball teams were the first to be tested because their seasons were already completed. Then, the women's softball team, the only team available for group administration, was next measured. All others took part in the study on a single-subject administration which accommodated the athlete's schedule. The golf and tennis teams were away at championship meets, so they were tested last. Data were collected from the coach separately.

Debriefing procedures were conducted at the end of data collection. Eight female subjects who participated in more than one sport were requested to rate their teammates in both sports. However, these subjects completed the rest of the test battery only once. A form postcard was sent to all subjects informing them of the intended purpose of the study

and thanking them for their participation. Coaches were debriefed verbally by the investigator.

Scoring of the Scales

The Dailey Assertion Scale. All players' responses were recorded directly on the scale to minimize errors; scores were transferred to a master scorecard. The process of scoring involved converting an "X" response to the appropriate numerical value which was the average weight of the judges' responses for that particular alternative. These values were then totaled to obtain a player's total scale score. The highest total score one could receive on the scale was 114.1 and the lowest was 29.4. Items 5, 10, 15, 20, 25, and 30 were filler items and not scored.

Social Desirability Scale. This 33-item instrument was scored as indicated by the authors. There were 18 items keyed true and 15 false making a response set interpretation of scores highly improbable. The score was generated by assigning a value of one to each item that was different from the indicated direction. A high score on this scale implied a high need for the approval of others. Norms established by the authors (Crowne & Marlowe, 1964) indicated that any score over 17 for females and over 15 for males was scored as high. All scores falling below these means were interpreted as low.

Teammate ratings and coach evaluations. These ratings were recorded on a five-point basis with teammates and players considered as highly assertive given a 5 and those less assertive a 4, 3, or 2 rating; those teammates/players exhibiting no observable assertive behavior received a

1 rating for the 10-item instrument. Items 4 and 8 were filler items and not scored. These values were also summed to generate a summation value not to exceed 40 points. The teammate ratings were averaged for each athlete to achieve one grand sum.

The College Self-Expression Scale. This 50-item self-report measure utilized a five-point Likert format (0-4) with 20 positively worded items and 30 negatively worded items. Scoring followed Galassi et al.'s (1974) recommended procedures. A total score for the scale was obtained by summing all positively worded items and reverse scoring and summing all negatively worded items. Low scores were indicative of a generalized nonassertive response pattern. Those athletes with scores falling in the 95-105 range were ranked as low assertive, in the 122-127 range as moderately assertive, and those in the 145-155 range as highly assertive (Galassi, Hollandsworth, Radecki, Gay, Howe, & Evans, 1976).

Analyses

Item Discrimination

Item analyses, Pearson product-moment correlations, and discriminant function analyses were computed to determine item discrimination. All calculations utilized the Statistical Package for the Social Sciences (SPSS) Programs CROSSTABS, PEARSON CORR, and DISCRIMINANT. The item analyses were computed according to Magnusson's (1967) method for differences between extreme groups using the upper and lower 27% of the total score distribution. The analysis compared the proportion of individuals at each extreme who answered the item consistent with the

total test score classification with the proportion of individuals who answered the item opposite their total test score classification. The upper proportion was compared with the lower proportion on a nomograph to obtain the correlation coefficient between the items and the total test score (see Appendix C).

The second analysis utilized a Pearson product-moment correlation computation. The responses of all subjects was used rather than selecting both the upper and lower 27% of the sample. Each item of the DAS was correlated with the total test score for each respondent.

To determine the discriminating power of each item, a discriminant function analysis was computed between the two extremes of the total sample tested. The upper and lower 33% of the total score distribution was selected to represent the respective high assertive and low assertive respondents. Martens' (1977) development of SCAT offered a guideline for this calculation which fit the obtained data.

The results of the analyses should yield fairly consistent item patterns, if the questions represent the same content area. Based on the obtained coefficients for the item analysis, criteria for final acceptance of an item were established. For high and low respondents .40 was set as the criterion, a more rigorous standard than .20 and .30 which are frequently accepted. Application of this criterion to the high and low assertive samples equally assured that each item was sensitive to measuring both extremes of the disposition, a characteristic absent in many other scales. The Pearson product-moment correlations had to be significant at the .05 level or higher and have a minimum r of .21. For the discriminant analysis, only those items were accepted which were

included in the stepwise procedure.

Reliability

The test-retest method was not used because of the reactivity subjects might have in taking the test battery again. Analysis of variance was used because it did not require a retest. This procedure was provided by converting the data from the SPSS program to the SAS Program ANOVA. Procedures outline by Kerlinger (1973, pp. 448-451) were followed to calculate the variance between items on the scale, the variance between individuals (V_{ind}), and the residual or error variance (V_e). The computations used for obtaining the reliability coefficient were derived from the following formula:

$$r_{tt} = \frac{V_{ind} - V_e}{V_{ind}}$$

Internal Consistency

Internal consistency was concerned with the degree to which items in the DAS were interrelated. Evidence of this was demonstrated in part by the item analysis of the 27% low and high extremes of the sample and the Pearson product-moment analysis for all subjects. If the instrument has internal consistency, the correlations from the item analysis should be high for both high and low assertive subjects across samples, and also high when all subjects are included in the data analysis. Utilization of ANOVA also provided procedures for assessing item consistency (Safrit, 1973) in accord with the following formula:

$$r_{tt} = \frac{V_{items} - V_e}{V_{items}}$$

Content and Concurrent Validity

Having established item discriminability, reliability, and internal consistency, the next procedure sought to provide evidence that the Dailey Assertion Scale measured what it purported to measure. Content or face validity of the DAS was a matter of judgment about the representativeness of its items for measuring competitive assertive attitudes. Items were designed giving consideration to definitions and also the author's intuitive interpretations and deductions. Five judges also offered criticism and suggestions concerning the content and structure of the items.

Concurrent validity was determined by correlating scores on the DAS with those on the CSES. A situation-specific competitive assertion scale was expected to yield low to moderate positive correlation coefficients with nonspecific assertion scales. If high correlation coefficients between the DAS and CSES were obtained, this would suggest that the DAS measured the same type of assertion as a general assertion scale and therefore, would have no unique purpose. Correlation coefficients near zero would be equally disappointing in that they would be indicative of little or no relationship between the DAS and general assertiveness.

Convergence Between Modes

The coach's evaluation of an athlete's willingness to assert her/himself and her/his teammate ratings of this characteristic with respect to the competitive sport setting were compared to athletes' scores on the DAS. The purpose of such comparison was to determine if

athletes whom the DAS depicted as high or low assertive were similarly described by the coach and teammates.

Discriminant Validation with Constructs of Other Kinds

The SDS purports to assess the common response set of social desirability. Athletes' scores on this variable were correlated with their scores on the DAS to establish the relationship between the competitive assertive construct and a potentially confounding variable. If the DAS was independent of the SDS, it was reasoned that it would not correlate highly with it.

Discriminant Validation with Constructs from the Same Substantive Area

The DAS is a 30-item self-descriptive scale with responses given according to varying degrees of how one alleges he/she would behave for the situation described. The CSES is also a self-descriptive scale with responses given according to a Likert-type format. These two instruments represented different techniques within the same mode of assessing related constructs. Player/coach evaluations are descriptions of an athlete's assertive behavior from a player/coach point of view and as such served as a technique from yet another mode of assessing related constructs. A third technique within the self-descriptive mode which assessed an unrelated construct was the Marlowe-Crowne Social Desirability Scale, an instrument utilizing a true-false format. These five assessments were compared in an intercorrelational matrix in an attempt to determine a pattern of correlations similar to a predicted profile. The SPSS Program PEARSON CORR provided the analytic procedure.

Multiple Regression Analysis

The Statistical Analysis System (SAS) computer program GLM (General Linear Models) for multiple regression analysis provided probability level, the coefficient of determination, the error of prediction and its limits, the best equation for the regression line, the sequential sums of squares, partial sums of squares, and test for the null hypothesis when the parameter equals zero. The dependent variable was the DAS, and the independent variables were the CSES, SDS, teammate ratings and coach evaluations. This analysis provided the information to answer questions one through three in the problem statement and was employed to determine the extent to which scores on the DAS could be accounted for by the other four variables operating separately and in combination.

CHAPTER IV

ANALYSIS AND DISCUSSION OF DATA

The presentation of the data analysis and discussion is organized in accord with the procedures stated in the preceding chapter. Materials are grouped in three major headings: (a) scale formulation analysis, (b) scale response analysis, and (c) multiple regression analysis.

Scale Formulation Analysis

The competitive sport assertion scale developed for this study was a 30-item self-report, situation-response scale which utilized a five-point rating from the most desirable (5) to the least desirable (1). Responses represented varying degrees of attitude toward a situation. The subject selected the response which best indicated what he/she allegedly would do if confronted with the situation. Five judges were selected to rate the original 60 items on their appropriateness for inclusion in the scale and to rank the five item responses according to their desirability. If this 5-4-3-2-1 ranking could not be determined, judges were allowed the choice of duplicating a rank. Judges' responses served as the basis of item selection for the DAS and some items were ranked by as few as three judges.

On the basis of these deliberations, three criteria for item selection were set forth: (a) items had to be ranked by three of the the five judges as desirable or essential, (b) item responses had to

include at least three different rankings, one above three and one below three, and (c) item responses had to receive a .700 average intercorrelation coefficient. Twenty items were eliminated on the basis of the first two criteria. Spearman rank difference (rho) correlations were computed for the remaining 40 items to determine interjudge reliability. Sixteen more items were eliminated on the basis of these computations—five items were below the .700 criterion, and 11 items involved negative correlation coefficients and were, therefore, also excluded from the final scale.

The average intercorrelation coefficients for the 29 items ranged from .357-.993, and the interjudge reliability for the 24 selected scale items was .839 (an acceptable arbitrary standard of reliability). These results are summarized in Table 1 in Chapter III. See page 33.

Scale Response Analysis

Descriptive Statistics for the DAS

Table 2 summarizes the descriptive results of the DAS administration to the 74 subjects. The mean was 93.476, the standard deviation a 6.652, and variance of 44.249. The range of 28.6 points (78.8 minimum and 107.4 maximum) was not wide and affected some of the computations made later. The skewness revealed a symmetric distribution of scores with a small standard error, .773. This permits the interpretation that only five times out of one hundred would a score be found to deviate more than 1.5 points from the mean. Even though the distribution of scores approximates a normal curve, the distribution is somewhat flat as indicated by the negative kurtosis, -.481. A platykurtic distribution

Table 2

Summary of Descriptive Statistics of Responses to the Dailey Assertion Scale

Statistic	Value
Mean	93.476
Median	92.850
Mode	86.000
Standard deviation	6.652
Variance	44.249
Range	28.600
Minimum	78.800
Maximum	107.400
Skewness	-.008
Standard error	.773
Kurtosis	-.481

of scores affects the choice of subgroups in that they should consist of the upper and lower 29 or 30% of the total group (Cureton, 1957).

Item Discrimination

An item analysis was run utilizing the SPSS CROSSTABS Program for the upper 27% (scores 98.0 and higher) and the lower 27% (scores 89.7 and lower) of the responses. The analysis compared the proportion of individuals at each extreme who answered an item consistent with the total DAS score classification with the proportion of individuals who answered an item opposite their total test score classification. The criterion set for item retention on the DAS was a correlation coefficient of at least .40 for both high and low respondents. These comparisons were made on a nomograph (Magnusson, 1967). Eleven items were identified by this procedure; six correlations were significant at the .05 level or higher.

A Pearson product-moment correlation (SPSS PEARSON CORR Program) was also calculated which compared all respondents' scores on the DAS with each item. Fifteen items were significant at the .05 level or higher.

A discriminant function analysis was then computed utilizing the upper 33% (scores 97.5 and higher) and the lower 33% (scores 90.2 and lower). The SPSS DISCRIMINANT Program was used. The purpose of this procedure was to determine the discriminating power of each item for the respective high and low assertive respondents. Only those items for retention in the DAS were accepted which were included in the stepwise procedure. Stepwise discriminant analysis was used, therefore, to eliminate the less useful items before further analysis was performed.

The discriminant function computation generated 15 items as appropriate in a possible Version 2 of the DAS. The 15 items produced a very high degree of separation as indicated by the final Wilk's lambda (.11467) and a canonical correlation of .941. The canonical correlation squared (the proportion of variance in the discriminant function explained by the groups) was 88.5%. This leaves only 11.5% of the variance as unexplained.

The standardized discriminant function coefficients, representing the relative contribution of an associated item to that function, revealed that items 17, 8, and 13 contributed most. Then, items 3 and 4 followed in importance. Items 11, 5, 2, 20, 15, 12, and 22 were next; items 10, 18, and 19 contributed the least. However, each item made sufficient contribution for it to be retained in the analysis.

The results of these three analyses yielded fairly consistent item patterns. Items 3, 4, 8, 12, 15, 17, and 19 were strong on the item analysis, the Pearson product-moment correlations, and the discriminant function analysis. Seven more items met acceptable criteria on two of the three analyses: 1, 5, 7, 9, 11, 13, and 18. Six different items showed strength on only one analysis: 2, 10, 20, 22, 23, and 24. On the basis of these analyses, the investigator decided to retain 14 items in the DAS. The results of the three analyses are summarized in Table 3.

For those 11 items favorably evaluated in the item analysis, the mean correlation coefficient was .626 for the high assertive respondents and .280 for the low assertive respondents. These results suggested that the DAS discriminated better for the high assertive respondents. This raises some question about the generalizability of assertiveness as a

Table 3

Item Discrimination

Item Analysis Upper-Lower 27% N = 42		Pearson Product-Moment Correlations N = 74		Discriminant Analysis Upper-Lower 33% N = 50
Items	r	Items	p level	Items—stepwise order
01	.60	04	.001	15
08	.56	05	.001	08
15	.54	07	.001	17
17	.52	09	.001	13
03	.44	15	.001	11
07	.44	17	.001	03
12	.44	08	.002	04
18	.44	12	.004	05
04	.42	24	.005	02
09	.40	13	.007	12
19	.40	03	.008	20
		01	.016	10
		11	.018	22
		23	.029	18
		19	.031	19

component of successful performance for all athletes. It is also acknowledged that there is variability in assertion within sport groups. This has implications for the validity of the DAS. The mean coefficient for the Pearson product-moment correlations for the 15 significant items was .419.

Reliability

Reliability analysis was concerned with how consistently the DAS measured the sample of individuals from whom data were collected. Procedures outlined by Kerlinger (1973) using analysis of variance were followed. Data were converted from the SPSS Program to the SAS Program ANOVA to caculate the variance between items (V_{items}) on the DAS for all subjects, the variance between individuals (V_{ind}), and the residual or error variance (V_e). The results of this procedure revealed a reliability coefficient of .407 which is low, but not unusual for a first administration of a situation-response scale. Another method of interpreting this coefficient may be made by squaring the value, thus, indicating that the individual and item variance only shared 16.6% of the common variance leaving 83.4% unexplained.

Obtained DAS scores did not distinguish among the individuals within the extremes of the sample. One of the reasons for this was that there was not a great enough range of the sums of the individual scores. Another reason for the low reliability was that the errors of measurement were high. Some of the items could have been ambiguous and, therefore, open to highly individualized interpretation.

Internal Consistency

Internal consistency analysis sought to reveal the degree to which items in the DAS were interrelated. Evidence of this was demonstrated, in part, by the item analysis and also by the Pearson product-moment correlations. An analysis of variance among items was used to estimate the consistency of this scale according to Safrit's (1973) recommendation. The reliability coefficient in the procedure was estimated from the ratio of the total test variance (V_e) to the item variance (V_{items}).

This procedure was considered to be superior to any method based upon an arbitrary division of the test into halves. For example, Hoyt (1941) pointed out that if an unlucky odd-even split occurs, there may be an under or overestimate of the discrepancy between the observed variance and the true variance. It was evident in the present inquiry that such a split could occur; 11 of the 12 odd-numbered items were significant, and only 4 of the 12 even-numbered items.

The computation resulted in an acceptable reliability coefficient of .941. By squaring the coefficient, 88% of the item and individual variance was shared leaving only 12% unexplained. Thus, it may be interpreted that the DAS is homogeneous and unidimensional; i.e., it is likely that only one disposition, sport assertion, is measured.

The results of the analysis of variance using both $r_{tt} = \frac{V_{ind} - V_e}{V_{ind}}$ and $r_{tt} = \frac{V_{items} - V_e}{V_{items}}$ are summarized in Table 4. The F values for

both items and individuals were significant at the .001 level. The Hoyt analysis of variance technique for determining reliability yields the same results as the Kuder-Richardson Formula 20 (Hoyt, 1941). In essence, what the results obtained from these two computations seem to be indicating is that the items are homogeneous, but the individual sample scores are not; therefore, the measuring instrument is not reliable even though the items "hang together" (Kerlinger, 1973, p. 450).

Table 4

Analysis of Variance for Estimating the Reliability of the DAS

Variable	Source	df	SS	MS	F
Score	Items	23	384.86	16.73	16.85***
	Individuals	73	122.29	1.68	1.69***
	Item x Id.	1679	1667.35	.99	
	Total	1775	2174.49		

***p<.001.

Validity

Content validity. Analytic techniques described hereafter were carried out to provide evidence that the Dailey Assertion Scale measured what it purported to measure. Content validity was a matter of a priori judgment about the representativeness of the items in the DAS for measuring competitive assertive attitudes. Results of the five judges' deliberations on the situations included in the scale and item responses

reduced the DAS from 60 items to 24. Interjudge reliability was .839 for the 24 items retained. Items were designed giving consideration to definitions and also the author's intuitive interpretations and deductions. Five judges also offered criticism and suggestions concerning the content and structure of the items.

Intercorrelations Among All Variables

The correlation between all possible pairs of scores in the test battery is presented in Table 5. Concurrent validity, convergent and discriminant validations were determined from this analysis. The correlation coefficients presented in the matrix were rounded off to the nearest thousandth and were required to be significant at the .05 level.

Table 5

Pearson Correlation Coefficients
of Test Battery Scores

Variable		2	3	4	5
DAS	1	.273 ***	.104	.051	.009
CSES	2		-.051	-.259 **	-.015
SDS	3			.324 ***	.119
TEAM	4				.443 ***
COACH	5				

***$p \geq .001$ N = 74
**$p \geq .01$

Concurrent validity. Concurrent validity was determined by correlating scores on the DAS with those on the CSES. A valid situation-specific assertion scale pertaining to competitive sport was expected to yield a low to moderate positive correlation coefficient with a generalized assertion scale. This is precisely what resulted in this comparison. The obtained correlation coefficient was a significant (.009), positive, and low value of .273. This implies that the DAS has a unique purpose; at the same time, it has a significant relationship to the assertion construct.

Convergence between modes. The coach's evaluations and teammate evaluations of an athlete's assertiveness on a 10-item instrument was compared with athletes' responses on the DAS to determine if athletes whom the DAS depicted as high or low assertive were described as such by their coaches and teammates. The results of this comparison indicated that no such relationship could be claimed. The correlation between teammate ratings and the DAS was a .051; the correlation between the coach's ratings and the DAS was a .009. These results are highly similar to those of Simon and Martens (1976) when they compared an athlete's SCAT (Sport Competitive Anxiety Test) results with a coach's rating of a competitor's anxiety. Simon and Martens' correlation was a bit higher (+.14), however.

Three explanations are offered to account for the near zero correlations between the coach and player ratings and the DAS. First, the DAS may be a poor index of an athlete's competitive assertion. Secondly, the rather crude 10-item rating scale may be an inadequate

instrument; and thirdly, coaches and players may be inaccurate in their paper-and-pencil evaluations of an athlete's competitive assertion. It should be noted that the teammates and coaches agreed on their ratings of assertion. This correlation was the highest of the ten pairings (.443), and significant at the .001 level. It may be explained by the fact that the relationship derives from the use of identical instruments. The strength of this relationship suggests a viable topic for further systematic inquiry, however.

Discriminant validation with constructs of other kinds. An athlete's scores on the common response set of social desirability (Marlowe-Crowne Social Desirability Scale) were compared with the scores on the DAS to establish the relationship between the competitive assertive construct and a potentially confounding variable. The DAS was sufficiently independent of the Marlowe-Crowne SDS, r = +.104. Moreover, it was nonsignificant at the .189 level. Therefore, the DAS is not contaminated by social desirability.

Discriminant validation with constructs from the same substantive area. Designation of the variables according to the descriptive mode pairs the DAS with the CSES and the players' ratings with the coaches' ratings. Consideration of these according to technique calls attention to the different formats, multiple-choice situation response and Likert-type in the initial pair. In contrast, both of the ratings represented similar techniques but from a different mode, namely, from differing perspectives. A third technique within the self-descriptive mode (true-false format), but assessing an unrelated construct (social desirability),

was also included in the intercorrelational matrix.

The discriminant validation sought to clarify how the constructs related to one another. This requires that the correlation between different methods measuring the same trait exceed (a) the correlations obtained between the trait and any other trait not having the method in common, and (b) the correlations between different traits which employ the same method (Campbell & Fiske, 1959). There was a significant (.013), but low negative correlation (-.259) between how one's teammates rated an athlete's assertive behavior and an athlete's self-described assertiveness on a general assertion scale. This may be explained by the idea that while sport assertiveness is a positive or desired attribute in successful performance, as a general social skill assertiveness tends not to be highly valued.

A significant correlation coefficient (.002) was also reported between one's scores on the Marlowe-Crowne SDS and an athlete's rated assertiveness by one's teammates. This was indicative of a somewhat moderate relationship (+.324). Teammates' ratings of an athlete's assertiveness in the sport setting may have been influenced by a need for the approval of others. This was not necessarily unexpected given the social interaction which occurs within sport groups. The obtained value may be explained by sample size and gender. Three of the 19 male subjects refused to evaluate their teammate's assertiveness; none of the women refused to offer such judgments. Such a sex difference is further revealed in Marlowe and Crowne's norms for college men and women. The men's mean score is two points lower than that of the women's for the 33-item scale.

Multiple Regression Analysis

Multiple regression analysis was employed to answer three of the questions which framed this study: (a) how a competitor viewed her/his assertiveness and how others viewed her/his assertive behavior in the sport setting, (b) how an athlete reported her/his assertive behavior on a situation-specific assertion scale and on a general assertion scale, and (c) with respect to a and b above, was the DAS a valid scale? In general, the analysis offered insights into the results of the Pearson product-moment correlations in the intercorrelational matrix. These results are summarized in Table 6. The DAS was designated as the dependent variable and the CSES, SDS, teammate ratings, and coach's ratings, the independent variables. The GLM (General Linear Models) procedure from the SAS Program was utilized.

The resultant analyses revealed that the variability of the scores on the DAS had 88 chances in 100 of being explained by the regression equation ($p = .120$). Ten percent of the variance of this sample with these five variables can be explained with the equation: DAS = 72.782 + .103 CSES + .106 SDS + .325 TEAM + (-.103) COACH leaving 2909.36 units unexplained. This may be interpreted as an unacceptable model in that 90% of the variability is unexplained. From an intuitive perspective, the variability may be associated with the complexity of the construct.

With respect to prediction, it would be feasible to estimate one's scores on the DAS within 12.98 points which is a large error considering the obtained range of 28.6 points. The CSES alone accounted for 75% of the explained variability, but only 7% of the total variability. In the

Table 6

Multiple Regression Analysis of Test Battery Scores
Summary of General Linear Models Procedure

DAS Dependent Variable

I: Source	df	SS	MS	F	PR>F	R^2	C.V.	Mean	SD
Model	4	320.795	80.199	1.90	.119	.099	6.946	93.48	6.49
Error	69	2909.356	42.164						
Total	73	3230.151							

II: Independent Variables	Partial SS	F	PR>F	Sequential SS	F	PR>F
CSES	284.119	6.74	.011	240.257	5.70	.020
SDS	20.895	.50	.484	45.234	1.07	.304
TEAM	35.303	.84	.363	28.190	.67	.416
COACH	7.115	.17	.682	7.115	.17	.682

order they were entered, the SDS added only 14% more, teammate rating 8.75% more, and coach's rating 2.25% more which is very little at the time they came into the equation. The least unique contribution was made by the coach's rating (68% chance of its occurring by chance alone), then the SDS (a 48% chance of its occurring by chance alone), followed by the teammate rating (36% chance of its occurring by chance alone).

What the variables contributed at the time they came into the equation were the exact duplication of the Pearson product-moment correlation results for the DAS and the other four variables. The autocorrelation of -.086 and the Durbin-Watson D test applied to this value indicated there was no pattern to the errors on the DAS.

In summary, on the basis of the results of the data analysis from the Pearson product-moment correlations, and the multiple regression analysis, no relationship was found between how a competitor viewed her/his competitive assertion and how others viewed her/his assertive behavior. There was a significant and moderate correlation between how the coach and teammates rated an athlete's assertive behavior ($r = .443$; $p = .001$). A significant but low relationship was found between the DAS and the CSES suggesting that the DAS has a unique purpose. With respect to validity, analyses did not yield clear results. This instrument established content and concurrent validity, and discriminant validity with constructs of other kinds. It did not establish convergent validity, nor discriminant validity with constructs from the same substantive area. These same divergent results were mirrored in the reliability parameters. The reliability of the instrument was only .409, but the reliability of the items was .941.

CHAPTER V

SUMMARY, DISCUSSION, AND CONCLUSIONS

Summary

The broad purpose of this study was to develop and validate a self-administered situation-specific assertion scale for collegiate male and female competitive athletes. The inquiry further sought to determine whether obtained scores from the paper-and-pencil measure reflected one's perceived assertiveness of the athletes in the "real" sport environment. More specifically, this investigation sought to identify the relationships among an athlete's assertiveness as measured by the Dailey Assertion Scale, teammates' evaluations of her/his assertiveness, and the coach's assessment of the athlete's assertiveness. Secondly, the relationship between an athlete's scores on the DAS and her/his scores on a general assertion scale (Galassi et al., 1974, CSES) was investigated. Finally, in the light of the above, the study was designed to reveal whether or not the DAS was a valid instrument for the assessment of sport assertion.

Seventy-four male and female intercollegiate athletes and their coaches at the University of North Carolina at Greensboro during the school year of 1977-1978 served as subjects for the study. They represented four teams for men (swimming, tennis, soccer, and basketball) and seven teams for women (golf, swimming, tennis, basketball, field hockey, softball, and volleyball). A research approach was used in

which the behavioral effects of environment and individual difference variables, and their interaction are concurrently studied.

Procedures for the development of the DAS involved the identification of subclasses of assertive behaviors which were typically associated with everyday competitive sports settings. A pool of items was generated from ideas about assertion expressed in the social psychology literature and from Cratty's (1973) rating scale. Five experienced judges were presented with a list of 60 items and requested to rank each item response alternative in the order of desirability. If a 5-4-3-2-1 ranking was impossible to make, judges were directed to assign duplicate rankings to item response alternatives. Items were also evaluated with respect to whether or not they had the potential to contribute to the scale. The following criteria were required for item selection: (a) three of five judges had to consider an item as either desirable or essential, and (b) judges' rankings had to include three different ranks with one above three and one below three. Upon the application of these criteria to judges' responses, 20 of the initial items were eliminated from the pool.

Intercorrelations were calculated on the remaining 40 items utilizing the SAS Program CORR SPEARMAN. An average intercorrelation using the z' transformation was computed to determine interjudge reliability. The rank order correlations were transformed into z' values, averaged, and reconverted to the correlation coefficient. The average intercorrelation of the response alternatives for an item had to be .700 or better to be retained on the scale. This criterion was not met by five items. Eleven of the remaining 35 items involved negative

intercorrelations. These were also eliminated as they, too, were interpreted as indicating a lack of interjudge reliability. The average intercorrelation for the 24 accepted items was .839. Six filler items were added to the 24 selected items. Thus, there was a total of 30 items in the final scale.

The DAS, the Galassi et al. (1974) College Self-Expression Scale, the Marlowe-Crowne (1960) Social Desirability Scale, and a player/coach rating scale were administered to the 74 athletes and their coaches. Three analyses were computed using the SPSS Programs CROSSTABS, DISCRIMINANT, and PEARSON CORR. The analyses were carried out to determine item discrimination for the DAS as follows: (a) an item analysis on the upper/lower 27% of the sample, (b) a discriminant function analysis on the upper/lower 33% of the sample, and (c) a Pearson product-moment correlation on all 74 subjects. Criteria for final acceptance of an item in the item analysis was a .40 for the high and low respondents. The Pearson product-moment correlations had to be significant at the .05 level or higher and have a minimum r of .21. For the discriminant function analysis, only those items were accepted which were included in the stepwise procedure.

Fourteen items met the criteria of the three item discrimination analyses. These items were strong on at least two of the three analyses. Items which were acceptable on only one analysis were eliminated for consideration in the final scale.

An analysis of variance procedure was utilized to evaluate the reliability of the DAS as a measurement tool and to assess the internal consistency of the scale items. Data from the SPSS Program was converted

to the SAS Program ANOVA. The reliability of the scale was .409 and items were internally consistent at an r of .941.

Content validity of the DAS was assumed. However, concurrent, convergent, and discriminant validations were assessed utilizing an intercorrelational matrix of all possible pairings of the five variables under study. A PEARSON CORR Program from the SPSS package effected this computation.

Multiple regression analysis was employed to answer questions one through three in the problem statement. The GLM (General Linear Models) procedure from the SAS Program was utilized. In general, the analysis offered insights into the results of the Pearson product-moment correlations in the intercorrelational matrix. The resultant analyses revealed that no relationship was found between how a competitor viewed her/his competitive assertion and how others viewed her/his assertive behavior. There was a significant and moderate correlation between how the coach and teammates rated an athlete's assertive behavior. A significant but low relationship was found between respondents' scores on the DAS and their scores on the CSES. This was interpreted as suggesting that the DAS has a unique purpose, the assessment of sport assertion.

With respect to validity, analyses did not yield clear results. The DAS was established as having content and concurrent validity. Furthermore, it was found to have discriminant validity with constructs of other kinds. However, analyses did not establish convergent validity, nor discriminant validity with constructs from the same substantive area.

Discussion

The following discussion was developed (a) to permit enumeration of obstacles met by the investigator in the process of conducting the present inquiry, and (b) to propose definitive steps which might be taken to improve the instrument so that it may be useful in the study of sport assertion. Although they reflect ex post facto understandings, they are not offered as apologies. Nine procedural and criterial considerations are addressed:

1. Establishing an item pool. Attempts to balance the specificity of the sport environment with generalizable meanings while, at the same time, maintaining comparability with broad concepts of assertion was difficult. Had another model with a multiple-choice format been available, the construction of situations and five alternative responses would have been facilitated. The revision of the present scale should provide a better point of departure for scale revision. Moreover, such revision could be more systematically undertaken by the investigator given her experience.

2. Judge selection. The investigator's decision to include on the panel of judges an individual who was not familiar with the sport environment, resulted in the elimination of many items which were favorably evaluated by the other four judges. It also sacrificed having the benefit of five judges' responses to evaluate all the items which, in a sense, was a loss of thoroughness. The selection of five new judges, all familiar with the construct of sport assertion, should yield better focused and more complete evaluations for subsequent scale development.

3. Negative intercorrelations from judges' rankings. Eleven items had to be discarded because they involved negative intercorrelations. There seemed to be no one judge whose pattern of rankings contributed to the negative values. The computational results clearly provide further evidence that the construct under investigation is extraordinarily confounded. Possibly clearer definition of assertion in sport may emerge from continued research efforts having systematic and in-depth methodology. One such effort may be the extension of the present study into a second version.

4. Administrative procedures. Because the test battery was not completed until very late in the Spring semester, only one team (softball) took part in the present study under conditions of group administration. Of the 111 athletes in the target population, only 74 were tested. Nineteen of these, men, responded out of a possible 48, while 55 of the 63 female athletes responded. Having a larger sample of male athletes may have altered the results of the study. Also, the nature of the athletic program at the University of North Carolina at Greensboro has some specific characteristics which could have affected the evaluation of DAS items. Although this could be the case in any given institution, the history of UNC-G suggests it is more the exception than the rule.

5. Low reliability of the DAS. The ANOVA procedure for testing reliability has the characteristic of a powerful test. It uses the variability of scores for analysis. Therefore, respondent's scores on the DAS must show more range. A homogeneous sample such as the one used in this study can only generate a limited range which makes exceptional

demands on item preparation. The investigator computed an ANOVA for the 14 items which were accepted from the item discrimination analyses and an r of .409 for the 24 items increased to an r of .485 with the 14 selected items. Thus, the addition of 14 more items could step the reliability up to .653 using the Spearman-Brown Prophecy Formula:

$$r_x = \frac{nr}{1 + (n - 1)\, r}$$

In other words, the reliability of the DAS seems low because a rigorous test was used. A more common method of calculating reliability would probably suggest that the DAS has higher reliability.

6. Low discrimination for the low assertive respondents. This problem is related to the range of responses. For the 11 items favorably evaluated in the item analysis, the low assertive respondents had a mean correlation coefficient of .280 while the high assertive sample had a mean of .626. Again, the relatively narrow range of the scores on the DAS among extremes did not "allow" the low assertive group to show distinctiveness from the upper 27%. This is a problem in the development of situation-specific items. The response alternatives must be viable for both extremes of a given sample. In the present study there were items which had no representation from the less assertive respondents on the least desirable response alternative. Low discrimination for the low assertive respondents (as measured by the DAS) may, in part, be a function of the sample used in this study. Were the competitive assertive construct to be tested with scholarship athletes, the results might be more discouraging. "Elite" athletes would be

expected to demonstrate more homogeneity. The rigorous selection procedures permitting entry into an elite group would likely reject less assertive athletes.

7. Lack of establishment of convergent validity and discriminant validity with constructs from the same substantive area. According to Campbell and Fiske (1959), many intercorrelational matrices do not show convergent validation. That is, no relationship may be found between two methods of measuring a trait. One of the reasons for this lack of relationship pertains to the functional unity of the trait being measured, or "the response tendencies involved being specific to the nontrait attributes of each test" (Campbell & Fiske, p. 104). Additionally, the authors suggest "The failure to demonstrate convergence may lead to conceptual developments rather than to the abandonment of a test" (p. 104). In the case of the DAS, there is sufficient support to warrant further development and refinement.

As for discriminant validation, one additional way to improve the validational process would be to include an established measure of aggression in the test battery. This was not done in the present study because of practical considerations. Further, many investigators have neither attempted nor been successful in validating their assertion scales against such a measure. Regardless, there would be considerable potential for an aggression score, assuming an appropriate measure could be identified, to contribute to establishing the validity of the DAS.

8. Lack of reliability and validity of the player/coach rating scale. The 10-item rating scale used by players and coaches to evaluate an athlete's assertive responses should be replaced with a more precise

measure, one that has demonstrated reliability and validity. The obtained ratings using the crude scale showed no relationship to an athlete's self-reported assertiveness. Also, there was variability in the number of players who made up the participating teams. Some players and coaches had to rate many more subjects than others, e.g., two males from the tennis team each rated only one team member. On the other hand, all players from the women's softball team served as subjects which meant that each player had to rate 15 teammates. This variability may have contributed to the results.

Further, while the investigator attempted to parallel the situations described in the DAS with those described on the rating scale, players and coaches were making an assessment of the assertiveness of other players and teammates from the perspective of an athlete's participation on one team or in one situation. At the same time, all athletes described their assertiveness on the DAS across a number of situations. Thus, two perspectives were brought to bear in these judgments.

9. Nongeneralizability of results. Although this factor was acknowledged at the outset of the study, the sample was specifically selected as appropriate for the first stages of developing and validating a self-administered, situation-response assertion scale. Once the DAS has been shown to be a more reliable and valid self-report measure of competitive assertion, future sample selection must be isomorphic with the stage of development of the scale. Also, an equal representation of male and female subjects should enhance the reliability and validity of the scale. Two or three further revisions of the DAS will hopefully yield norms thus permitting more generalizability of results.

Undoubtedly, though, the attainment of such a goal will be dependent on the status of sport and limits imposed on colleges and universities by governing organizations.

Conclusions

Within the framework of the questions posed and tested and within the limitations of the study, the following conclusions are justified:

1. What are the relationships among an athlete's assertiveness as measured by the Dailey Assertion Scale, teammates' evaluations of her/his assertiveness, and the coach's assessment of the athlete's assertiveness? No significant relationship exists between a competitor's self-reported assertiveness on the Dailey Assertion Scale and her/his assertive behavior as viewed by teammates and/or coach. There is a significant and moderate relationship between a player's and coach's assessments of an athlete's assertive behavior.

2. What is the relationship between an athlete's scores on the DAS and her/his scores on a general assertion scale? There is a significant, but low relationship between an athlete's scores on the Dailey Assertion and her/his scores on a general assertion scale (Galassi et al., 1974, College Self-Expression Scale).

3. In the light of the above, is the DAS a valid instrument for the assessment of sport assertion? Content, concurrent, and discriminant validity with constructs of other kinds were established for the DAS. It did not establish convergent validity, nor discriminant validation with constructs from the same substantive area.

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APPENDIX A

DIRECTIONS TO JUDGES AND THEIR EVALUATIONS

Directions to Judges and Their Evaluations

Directions:

The items on the following pages are situation-response items related to how one expresses her/himself in the competitive sport setting. Assertion is defined in this scale as a direct and open expression of one's self that excludes aggression. It is a dominant and taking-charge attitude which contributes to success in competitive sport. Please make two judgments on each of the items.

I. Rating of Responses

Read each situation carefully. Then read the five responses which indicate possible actions toward the situation. You are a member of a panel to judge the responses ranging from the most desirable behavior to the least desirable behavior. Please disregard your personal attitude toward the situation. Assign a value of five (5) points to the response which you judge to be the most desirable, four (4) points to the next most desirable, three (3) points to the next most desirable, and so on, until the least desirable response which receives a one (1) rating. For example:

_____ 1. I hold a reserved ticket for my favorite sporting event only to find that another spectator is sitting in my seat. I would:

5	a.	request that the spectator check her/his ticket and then move
2	b.	blow my stack and demand that he/she move immediately
3	c.	ask for a ticket check of spectators in the immediate vicinity
4	d.	look for an usher to handle it as that is what he/she is there for
1	e.	look for another seat and avoid the hassle

If you had rated the responses as indicated, it would mean that you rated a as the most desirable action to be taken in light of the definition of assertion which is the direct and open expression of one's self excluding aggression. D would be the next most desirable, c as the next most desirable, etc. Remember, you are to rate the responses in their order of desirability and not necessarily as to how you would personally respond.

If you feel it is impossible to rate the responses for a particular item on a 5 to 1 scale, you may assign a duplicate value to two or more responses you think are equally desirable or equally undesirable. For example, in a given item, you may feel that two responses rate 4 points, two responses rate 1 point, and one response rates 3 points. Make certain that each response for every item is rated. The combined ratings of the judges will be used to determine the final weightings of responses.

II. Evaluation of Items

Additionally, please evaluate each item individually in its totality. Indicate, in the space provided to the left to the item number, how you would rate each item in view of its contribution to the total scale. Use the following scoring method:

E—Essential and should be included in the scale

D—Desirable and therefore acceptable in the scale

U—Undesirable and should be left out of the scale

The Dailey Assertion Scale

_____ 1. In response to a questionnaire I am requested to fill out, I state my preferences regarding those activities in which I have the most skill and why I prefer them. I would prefer to participate in those sports in which I have the most skill because:

_____ a. I could present a model for others to follow
_____ b. I would not look foolish
_____ c. I would not lose
_____ d. I would be much less anxious and tense
_____ e. I could give my opponent the ultimate challenge

_____ 2. My coach requests that I list my long-term objectives for workouts. My ultimate goal is to:

_____ a. set new records so I will become well known in my sport
_____ b. vary the workout so it doesn't become boring and I can get on with playing the game
_____ c. go as far as I can go both physically and psychologically
_____ d. play it safe so I don't injure myself physically and/or psychologically
_____ e. make workouts as productive as possible so I can achieve the most in the least amount of time

_____ 3. I am competing against an opponent in racket sports. I would:

_____ a. try to play my own game regardless of situation and opponent
_____ b. try to intimidate my opponent by taking the initiative
_____ c. play better if I could psych myself up before a match
_____ d. play better if I could remain emotionally detached
_____ e. try to play the percentage shots

_____ 4. It is my turn at bat. I usually attempt to:

_____ a. bunt because I just want to get on base
_____ b. hit the ball directly at the pitcher because I know he/she is not the best of fielders
_____ c. just wait for the pitcher to walk me because I have a deceptive batting stance
_____ d. swing away to hit the ball "out-of-the park"
_____ e. hit the ball to the opposite field to keep the fielders honest

_____ 5. I am playing singles instead of doubles because:

_____ a. I don't have to rely on anyone but myself
_____ b. I get a chance to show all my stuff
_____ c. I can play as much of an attacking game as I can initiate
_____ d. I can play the waiting game and surprise my opponent with an occasional smash and/or kill shot
_____ e. I get a chance to take all the credit for performing well

_____ 6. I am asked to justify the importance of game rules. I explain that they are important because they:

_____ a. allow me to play within a well-defined structure
_____ b. allow me to see just how far I can go before a foul is called
_____ c. are made to be broken under certain circumstances
_____ d. are there for me to interpret as I see fit
_____ e. are there to represent the "spirit and intent" of the game

_____ 7. I am working the ball down the field/court. It gives me the greatest pleasure to:

_____ a. leave my options open to the last moment as to how I'll play my opponent
_____ b. dodge/tackle as many opponents as I can before I shoot/pass
_____ c. dodge/tackle at least one or more opponents before I shoot/pass
_____ d. shoot/pass and/or dodge/tackle only when I have no other choice
_____ e. shoot/pass and/or dodge/tackle as soon as I can

_____ 8. An opponent hits a lob shot to me. I would:

_____ a. return the shot with a lob
_____ b. return the shot as best I could to keep the rally going
_____ c. return the shot as hard and fast as I could past my opponent
_____ d. return the shot as soft and accurately as I could directly at my opponent
_____ e. return the shot as deceptively as I could to keep her/him guessing

_____ 9. I think that an official's call is questionable. I would:

_____ a. not become involved at all
_____ b. hope the spectators voice their displeasure
_____ c. voice my displeasure to the official
_____ d. voice my displeasure to my teammates and coach
_____ e. let my team captain and/or coach handle the situation

_____10. I am playing a closely contested match in racketball. I would:

_____ a. direct shots to my opponent's weaknesses as that seems the best strategy
_____ b. hit my opponent with the ball on the way to the front wall to get a replay on my weak shots
_____ c. hit the ball onto the front wall so it deflects off and hits my opponent so he/she will not have time to return my shot
_____ d. continue to play my own game
_____ e. directs shots to my opponent's strengths because that challenges me most

_____11. It is the off season. I engage in activities other than my varsity sport because:

_____ a. I can just relax
_____ b. I can compete at a less intense level
_____ c. I can enjoy being with friends
_____ d. I can enjoy the environment which is free of spectators
_____ e. I can just forget myself

_____12. I am working out on the diving board and/or trampoline. I prefer to:

_____ a. hit the board and/or bed hard to get as much height as possible
_____ b. get as many routines and/or dives down pat as possible
_____ c. do as many difficult dives and/or routines as possible
_____ d. hit the board and/or bed softly so it does not detract from the dive or routine
_____ e. vary how hard I hit the board and/or bed so I will be ready to compete on any unfamiliar board or trampoline

_____13. My coach or teammates compliment me for making an extra-ordinarily fine play/shot. I would respond by:

_____ a. becoming embarrassed and muttering an unintelligible reply
_____ b. acting as though it happens all the time
_____ c. thanking her/him/them and hoping that I will be that successful again
_____ d. thanking her/him/them and proceeding to explain and demonstrate just how it happened
_____ e. stating that I couldn't have done it without their help

_____14. My coach chews me out for messing up a "once-in-a-lifetime" opportunity to show the world what kinds of talents I have. I would:

_____ a. become more anxious and uncertain of myself
_____ b. accept the responsibility for the mistake, but blame it on a teammate whom I feel caused the miscue
_____ c. chew out the teammate whom I feel caused me to miss my golden opportunity
_____ d. take it out on my equipment
_____ e. eliminate all the possibilities for another miscue to the extent that I could so that I wouldn't miss another "chance-of-a-lifetime"

_____15. I am requested to identify my athletic role model. I would identify with a role model who:

_____ a. continually confronts her/his opponent
_____ b. stretches the game rules to their fullest extent
_____ c. asks an official to keep an eye on an opponent because he/she is fouling her/him
_____ d. takes risks to achieve the desired result
_____ e. plays her/his own game no matter what the circumstances

_____16. I am facing a particularly formidable opponent. I would:

_____ a. tell myself I'll never beat her/him/them, but I'll give it my best shot
_____ b. tell myself no matter what happens, I am the one who has to live with myself, so no one but me is ultimately responsible for my actions
_____ c. tell myself no matter how I have performed in the past against her/him/them, I'll play my best because this opponent brings out my best
_____ d. stretch the rules as far as I can to make certain I'll get a fair shake because my opponent plays this way
_____ e. tell myself I am going to beat her/him/them even though I have always been beaten by her/him/them in the past because my luck is bound to change

_____17. An opponent continually fouls me. I would:

_____ a. chew out my opponent
_____ b. try to forget it and accept it as part of the game
_____ c. complain to the officials and ask them to keep an eye on my offending opponent
_____ d. return her/his action with a similar one
_____ e. lose my temper and throw the ball/bat/racket/club down

_____18. My coach makes an unreasonable request of me concerning my competing when I am still recovering from an injury. I would:

_____ a. refuse to even consider it
_____ b. get out on the field, court, course immediately
_____ c. get my teammates to talk to the coach about it
_____ d. give in to my coach's demands occasionally
_____ e. present my reasons for not complying, but if the trainer agrees, play

_____19. I have made up my mind to pursue a certain playing strategy. I would:

_____ a. stick with it regardless of its effectiveness
_____ b. give it up immediately when things seem to go wrong
_____ c. go to my coach and/or teammates for advice
_____ d. give it up if it is a losing strategy
_____ e. stick with it until my opponent comes around to my way of thinking and playing

_____20. It is time to elect team captains. I would elect those who:

_____ a. resort to physical means to show their authority
_____ b. verbally abuse their teammates to get things done
_____ c. quietly accept the responsibility for their actions
_____ d. risk the most when situations call for it
_____ e. get along well with everyone on the team/squad

_____21. My opponent does not call a penalty stroke on her/himself when accidently moving the golf ball with her/his club prior to teeing off. I would:

_____ a. call it to my opponent's attention
_____ b. call it to the official's attention
_____ c. let it go because I have had the same thing happen to me
_____ d. keep a close eye on my opponent so it doesn't happen again
_____ e. hit my own tee shot as far as I could to vent my frustration

_____22. I have to state my preferences for the college yearbook as to how I would like to be remembered as a team member. I would prefer to be remembered as:

_____ a. the play maker
_____ b. the assister
_____ c. the record breaker
_____ d. the most consistent
_____ e. the first substitute

_____23. My opponent is beating me in a closely contested match. I would:

_____ a. continue to play my own game
_____ b. occasionally call shots out of play that are in play
_____ c. attempt to keep my cool so I have an even chance at winning
_____ d. vent my frustration by throwing my racket/club/bat down
_____ e. take a few more risks than I normally would

_____24. There are many types of coaches. I perform best for the coach who:

_____ a. makes all the decisions so I can concentrate on the game/match/meet
_____ b. leaves all of the playing decisions up to me once the game/match/meet starts
_____ c. leaves all of the decisions up to the team at all times
_____ d. makes the decisions in the crucial parts of the game/match/meet
_____ e. leaves the playing decisions up to me in the crucial parts of the game/match/meet

_____25. I have obviously inaccurately assessed my opponent's strengths/weaknesses. I would:

_____ a. make excuses for my poor performance
_____ b. own up to my mistakes and seek help in reversing the situation
_____ c. own up to my mistakes, but try to figure out for myself how to reverse the situation
_____ d. blame it on my coach and teammates for not helping me
_____ e. blame it on my own inexperience

_____26. I have come late to practice for the third practice in a row. I prefer my coach to respond by:

_____ a. being consistent however he/she handles the situation
_____ b. giving me the silent treatment
_____ c. chewing me out and forgetting it
_____ d. having the team captain handle it
_____ e. giving me additional practice experiences

_____27. A teammate continually hogs the ball and/or takes shots meant for me. I would:

_____ a. allow her/him to do it because he/she doesn't misplay it as often as I do
_____ b. resent her/his actions and tell him/her so
_____ c. resent her/his actions and ask my coach to handle it
_____ d. allow her/his to do so because I will get my share of the plays
_____ e. forget it because it is part of the game

_____28. The press requests that I describe my style of play. I would respond that:

_____ a. I have competed more or at a higher ranking because I take the initiative
_____ b. I have not been used as much because I just don't make things happen
_____ c. I have been known to be a bit erratic at times
_____ d. I can be counted on to keep my cool, but if somebody beats me out I try that much harder not to let it happen again
_____ e. I have been known to be a bit verbal/physical at times when the situation calls for it

_____29. My coach comes to me for a decision on whether to schedule a match/game/meet against a team which has in the past exhibited all kinds of unethical practices when we have competed against them. I would respond:

_____ a. "Every team cheats to some extent if they know they can get away with it, so why not?"
_____ b. "There is no way I want to compete against them again, so let's not schedule them."
_____ c. "How do you and the rest of the team feel about it?"
_____ d. "Why do you even bother to ask me when you know how strongly I detest playing them?"
_____ e. "You and the team captains make the decision."

_____30. I am trying out for the team. My aspirations are:

_____ a. to get as much playing time as is possible
_____ b. to become one of the starters or be ranked high
_____ c. to make the team in any capacity
_____ d. to be the best there is
_____ e. to make the best use of all my talents

_____31. A teammate continually takes the credit for a team's/squad's successful performance. I would:

_____ a. really become upset because no one player is that good
_____ b. tell the media, my coach and/or team captains or anyone else who would listen that so-and-so is a big showoff
_____ c. let that player know in no uncertain terms that it was a team effort
_____ d. give my teammate's locker a good swift kick
_____ e. feel it is justified because he/she is our best performer

_____32. I am requested to select an activity in which to play goal-keeper and to state a reason for this preference. I would select:

_____ a. soccer because it allows so many divergent ways to score in such a large target area
_____ b. waterpolo because the ball doesn't come in as fast
_____ c. field hockey/ice hockey because of the speed of the shots directed at me
_____ d. lacrosse because of the finesse of the shots directed at me
_____ e. football because it doesn't require one and there is no way I would put myself in such a vulnerable position

_____33. I seem to get along well with most athletes. However, there are some who really bug me because they:

_____ a. make excuses for playing poorly when they should just admit it and correct their errors
_____ b. feel guilty about playing rough or taking unnecessary risks to score
_____ c. depend too much on me to make things happen
_____ d. complain to the coach or referee that they are being fouled
_____ e. draw fouls or penalties because they don't have the necessary skills or body control to do otherwise

_____34. I want to favorably influence an offical's decision. I would:

_____ a. play only within the rules
_____ b. be pleasant to that official
_____ c. point an accusing finger at my opponent
_____ d. play as unobtrusively as I could
_____ e. play as spectacularly as I could

_____35. My team is extremely far behind in a game/match/meet. I would:

_____ a. hang in there no matter what
_____ b. try harder to perform better
_____ c. become angry and openly display my frustration
_____ d. be patient and wait for opportunities to turn the game/match/meet around
_____ e. chalk it up as one of those game/match/meet experiences

_____36. I have the opportunity to choose all over again the type of activity in which I would prefer to compete and why. I would choose:

_____ a. neither team sports nor individual sports, but activities which challenge me intellectually and require novel responses from me
_____ b. team activities because they allow for leadership as well as follower roles
_____ c. individual activities because I am competing against already determined opponents at my own level
_____ d. team activities because I don't have to stand out to be successful
_____ e. individual activities because I can call the shots

_____37. Athletes vary in their expression of personal opinions, feelings, and attitudes. Athletes I most admire:

_____ a. keep their personal opinions, attitudes, or feelings to themselves
_____ b. freely express their personal feelings, attitudes, or opinions but do not force them on others
_____ c. freely express their personal feelings, attitudes, or opinions but they must convince me of these
_____ d. are apologetic and concerned about hurting the feelings of others
_____ e. express their opinions, attitudes, and feelings when called for

_____38. My team is overwhelmingly ahead in a meet/game/match and my coach tells me to let up. I would:

_____ a. respect her/his wishes
_____ b. go ahead and score just as much as I possibly could as I owe it to my opponents
_____ c. respect the feelings of my opponents but also respect the fact that I have the right to do my best
_____ d. tell my coach to forget it because I want my opponents to know exactly where they stand in relation to our team
_____ e. rely on the substitutes to let up so the let up would be more convincing

_____39. Many situations exist in sport for self expression. My expression of assertiveness takes the form of:

_____ a. directly asserting myself by taking the initiative whenever possible
_____ b. asserting myself within the rules of the game
_____ c. asserting myself indirectly by doing it through others or in an indirect manner
_____ d. just being myself which doesn't require any assertiveness
_____ e. asserting myself by using my equipment or apparatus effectively

_____40. An announcer or scorekeeper inadvertently reports my score/ time incorrectly. I would:

_____ a. bring it to her/his attention immediately
_____ b. let my teammate or opponent correct it
_____ c. notify the tournament official in charge
_____ d. not worry about it as it will eventually be corrected
_____ e. let it go unless he/she repeatedly goofs

_____41. As a result of the implementation of Title IX, I learn via the media that athletes of my same sex on campus are only allotted 15% of the lockering and training facilities when in fact the female/male ratio of all students on campus is about equal. I would:

_____ a. go directly to the athletic director on campus and request equal representation, if this doesn't work make an appointment with the chancellor
_____ b. get all my teammates and other athletes of the same sex together to decide what to do
_____ c. be satisfied with the status quo as there isn't anything I can do personally to change things
_____ d. ask my coach to speak to the faculty for their support
_____ e. think things over very carefully and if there seems to be a reasonable and prudent way to change things, pursue it

_____42. I seem to be the only one who doesn't agree with the strategy decided upon for playing a certain opponent. I would:

_____ a. play my game plan no matter what
_____ b. seek a compromise
_____ c. give in as the majority rules
_____ d. find out what is wrong with my game plan
_____ e. listen to what my teammates have to say, but stick with my plan

_____43. I am in a social situation and one of my teammates is smoking right beside me which is particularly offensive to me and is also breaking training rules. I would:

_____ a. seek another group with whom to converse
_____ b. remind my teammate that I am allergic to smoke and request that he/she refrain from doing so in my presence
_____ c. tell her/him what a slob he/she is for breaking training rules
_____ d. tell the coach that my teammate transgressed
_____ e. tell another teammate to handle the situation

_____44. I am competing against my favorite opponent. My motto is:

_____ a. "winning is the only thing"
_____ b. "nice gals/guys can finish first"
_____ c. "let's give her/him/them our best"
_____ d. "I'll really be up for this game/match/meet"
_____ e. I'll have to get a good hate on"

_____45. I feel that I am being discriminated against because I am a participant in a so-called minor sport. I would:

_____ a. seek help from those who are in a position to change things
_____ b. bow to the desires of the administration
_____ c. not be swayed by attendance and/or budgetary considerations
_____ d. let those offending me know in no uncertain terms exactly how I feel
_____ e. bring Title IX or its equivalent to the appropriate administrator's attention

_____46. My mind sometimes tends to wander during practice. I prefer that the coach would say:

_____ a. "Tell me what I just said!"
_____ b. "What do you think I am running here, a kindergarten?"
_____ c. "What do <u>you</u> think I am trying to get across to you?"
_____ d. "Let me know when I am boring you, and I'll try to make practices more interesting."
_____ e. "Now look, if you can't pay attention, you can get your tail out of here!"

_____47. A teammate asks to borrow my favorite piece of equipment. He/she is not known to be very careful with the possessions of others. I would:

_____ a. lend it and if it's not returned in good condition, he/she would buy me a new one
_____ b. not lend it to her/him for any reason
_____ c. gladly loan it to her/him because he/she is my teammate
_____ d. gladly loan it to her/him after getting the necessary assurances that he/she would take good care of it
_____ e. give her/him a hard time about it, but lend it in the end

_____48. I am having one of those days when nothing I do on the court/field/course seems right. I would rationalize my poor performance by telling myself:

_____ a. everyone is entitled to a bad day now and then
_____ b. no one is perfect--I just couldn't seem to get it together today
_____ c. even the best performers can't be up all the time
_____ d. today is like any other day, my equipment just didn't feel right
_____ e. it wasn't my fault, I never play well on this field/court/course

_____49. I have played my very best. My reward takes the form of:

_____ a. seeing my name in print
_____ b. receiving the praise of others
_____ c. being high scorer, etc.
_____ d. feeling the warm glow of success for my individual as well as my team's efforts
_____ e. not having to practice the next day

_____50. An athlete complains for not having enough playing time. The best way for a coach to handle this is to:

_____ a. reassess the athlete, and if her/his play warrants it, play her/him more
_____ b. exert her/his authority and tell the athlete that he/she knows what he/she is doing
_____ c. make practice sessions harder for this athlete
_____ d. compromise--if he/she practices harder, he/she will play more
_____ e. tell the athlete that when her/his performance improves, he/she will play more

_____51. Some of my teammates continually play the ball instead of their positions, and/or may also attempt the spectacular shot. These teammates are:

_____ a. out for the glory of self
_____ b. overconfident in their own abilities
_____ c. playing where the action is because they like the risks involved
_____ d. not very knowledgeable athletes
_____ e. seeking to be involved in such play because they are extremely well skilled

_____52. I recognize the need for an Athlete's Bill of Rights which would legally guarantee the opportunity for any man or woman to select participation opportunities according to the nature, needs and desires of the individual. This would require that I:

_____ a. seek the aid of the federal government, but not its control
_____ b. forget the whole thing as there is little hope for such change
_____ c. allow the N.C.A.A. and the A.I.A.W. governing boards to handle it
_____ d. seek the aid of my fellow college athletes to present a united front
_____ e. make allowances for the slow wheels of progress toward change

_____53. I am preparing myself for a game/match/meet. The procedure which works best for me is to:

_____ a. wear my lucky hat, socks, suit, etc.
_____ b. consider my opponents as the enemy
_____ c. get away from everyone connected with the sport before game time
_____ d. rely on my coach or teammates to do it
_____ e. go through the same preparation that I always do before game time

_____54. I want to establish a good working relationship with my coaches. I would:

_____ a. do what I am told without question
_____ b. do what I am told in innovative ways
_____ c. question only those things which seem unreasonable and degrading
_____ d. do what is expected of me when it is a popular course of action
_____ e. question everything my coaches ask of me so they know exactly where I stand

_____55. The trainer suggests that medication is necessary for me to play. I would respond by:

_____ a. requiring adequate information about the medication before deciding to take it
_____ b. taking it without question as the trainer should know what he/she is suggesting that I take
_____ c. refusing to take medication of any kind as I have a high pain tolerance
_____ d. refusing to take it until I see how my other teammates respond
_____ e. requiring an outside medical opinion before taking it

_____56. I overhear a spectator's comments of a derogatory nature on the quality of my performance. My immediate reaction would be:

_____ a. ignore it as it isn't worth getting upset about
_____ b. send my coach or teammate to express my displeasure
_____ c. call the spectator over and explain my feelings about what I overheard
_____ d. go up into the stands to set that spectator straight
_____ e. admit that it hurt my feelings but accept it as a part of the game

_____57. A controversial subject comes up in a team discussion concerning how to handle athletes who break training rules. I am known for:

_____ a. presenting the opposite side of the argument
_____ b. staying out of the argument altogether
_____ c. supporting the popular viewpoint
_____ d. expressing my views without alienating everyone
_____ e. becoming sidetracked in my argument so I am often interrupted

_____58. I am trying to convince my conservative coach that a more imaginative strategy might win more games/meets/matches. To effect such change, I would:

_____ a. try to get my teammates to voice their support
_____ b. suggest changes to the coach in private
_____ c. try to get my team captain to talk to the coach
_____ d. voice my displeasure in practice
_____ e. suggest changes to the coach in writing

_____59. I am being interviewed by the media concerning my strengths and/or weaknesses as a performer. My response would be:

_____ a. "I am an excellent offensive/defensive specialist, but I should be as I've been at it for years."
_____ b. "I am good on offense/defense, but my offensive/defensive maneuvers need a bit of work."
_____ c. "I do risk more, but I usually can afford to."
_____ d. "I do need work on my specialty shots, but I feel comfortable with the basics."
_____ e. "I do need work on some special areas of my game, but doesn't everyone?"

_____60. A teammate stops me on my way to practice to talk to me. I would respond by:

_____ a. telling her/him to make it fast so I won't be late for practice
_____ b. telling her/him to see me after practice when I can give her/him the time he/she deserves
_____ c. telling her/him it's okay, and asking what the problem is
_____ d. telling her/him to talk to someone else, I just do not have the time
_____ e. telling her/him not to bother me now, this is a most important practice

TABLE A

Responses from the Panel of Judges to the Original Items

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
1.			U	U	D	D	D	
a.			3	2	1	4	5	
b.			3	3	4	2	2	
c.			1	4	5	1	1	
d.			3	1	3	3	3	
e.			3	5	2	5	4	
2.		5	U	E	E	D	E	filler
a.			4	1	1	3	1	
b.			3	3	3	1	3	
c.	5		4	5	5	4	4	
d.			3	2	2	1	2	
e.			3	4	4	5	5	
3.	1		U	D	D	U	D	
a.			-	5	5	4	5	
b.			-	4	4	5	1	
c.			-	1	2	-	4	
d.			-	2	1	-	2	
e.			-	3	3	3	3	

TABLE A

Responses from the Panel of Judges to the Original Items
(continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
4.			U	D	U	U	U	
a.			-	3	3	2	1	
b.			-	5	2	1	2	
c.			-	2	1	2	2	
d.			-	1	5	5	4	
e.			-	4	4	4	3	
5.	2		U	D	E	U	E	
a.			-	2	5	4	3	
b.			-	3	2	2	2	
c.			-	5	3	5	5	
d.			-	4	1	2	4	
e.			-	1	4	2	1	
6.	3	10	U	E	D	U	E	filler
a.			-	5	4	3	4	
b.			-	4	3	2	3	
c.			-	3	2	1	2	
d.			-	2	1	1	1	
e.			-	1	5	5	5	

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
7.	4		U	D	E	D	D	
a.			-	5	5	2	5	
b.			-	4	3	5	2	
c.			-	3	2	4	4	
d.			-	2	1	1	1	
e.			-	1	4	3	3	
8.			U	D	U	U	E	
a.			-	2	1	2	3	
b.			-	1	3	1	2	
c.			-	4	4	3	4	
d.			-	3	2	1	1	
e.			-	5	5	5	5	
9.	5		-	D	D	U	D	
a.			-	5	1	2	4	
b.			-	1	2	1	1	
c.			-	3	4	3	3	
d.			-	2	5	3	2	
e.			-	4	3	5	5	

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
10.	6	1	–	D	E	U	D	
a.			–	5	5	5	5	5.0
b.			–	1	2	1	1	1.2
c.			–	2	4	2	2	2.5
d.			–	3	3	4	4	3.5
e.			–	4	1	3	3	2.7
11.			U	E	U	U	U	
a.			–	3	4	3	4	
b.			–	2	1	5	5	
c.			–	5	5	3	3	
d.			–	4	2	3	1	
e.			–	1	3	1	2	
12.			U	D	D	U	U	
a.			–	2	2	2	3	
b.			–	4	5	5	5	
c.			–	5	4	5	4	
d.			–	1	1	1	1	
e.			–	3	3	3	2	

TABLE A

Responses from the Panel of Judges to the Original Items
(continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
13.	7	2	D	E	D	D	D	
a.			1	1	1	1	1	1.0
b.			2	3	2	1	2	2.0
c.			4	4	5	4	5	4.4
d.			4	5	4	5	4	4.4
e.			3	2	3	2	3	2.6
14.			-	E	D	D	U	
a.			1	1	3	1	1	
b.			1	2	4	1	3	
c.			1	4	2	1	4	
d.			1	3	1	1	2	
e.			5	5	5	4	5	
15.	8		-	E	E	D	D	
a.			-	4	3	4	3	
b.			-	3	1	1	2	
c.			-	1	2	2	1	
d.			-	2	4	5	4	
e.			-	5	5	3	5	

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
16.	9	4	-	E	D	E	E	
a.			1	2	1	1	3	1.6
b.			4	4	4	4	4	4.0
c.			4	5	5	5	5	4.8
d.			2	3	2	1	2	2.0
e.			3	1	3	3	1	2.2
17.			-	D	D	U	E	
a.			1	3	2	1	3	
b.			1	5	4	2	5	
c.			5	2	5	4	4	
d.			1	4	3	1	2	
e.			1	1	1	1	1	
18.			-	E	U	D	D	
a.			3	5	1	1	1	
b.			1	1	2	1	3	
c.			2	2	4	2	2	
d.			1	3	3	2	4	
e.			3	4	5	5	5	

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
19.	10		-	E	E	D	D	
a.			1	3	1	1	1	
b.			2	2	3	2	3	
c.			4	1	4	5	5	
d.			4	4	5	4	4	
e.			?	5	2	2	2	
20.			-	E	E	D	E	
a.			1	3	1	1	2	
b.			1	1	2	1	1	
c.			3	5	3	4	4	
d.			3	4	4	5	5	
e.			3	2	5	3	3	
21.	11	3	-	D	D	E	U	
a.			5	5	5	5	5	5.0
b.			4	4	3	4	4	3.8
c.			3	2	4	2	2	2.6
d.			3	3	2	3	3	2.8
e.			1	1	1	1	1	1.0

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
22.	12	6	U	D	E	D	D	
a.			-	5	5	3	4	4.2
b.			-	2	2	3	2	2.2
c.			-	3	3	4	3	3.2
d.			-	4	4	5	5	4.5
e.			-	1	1	1	1	1.0
23.	13	7	-	E	E	D	D	
a.			4	4	3	3	3	3.4
b.			1	2	2	1	2	1.6
c.			4	3	5	4	4	4.0
d.			3	1	1	1	1	1.4
e.			3	5	4	5	5	4.4
24.	14	8	-	E	D	U	D	
a.			-	1	1	1	1	1.0
b.			-	5	5	5	5	5.0
c.			-	3	3	3	3	3.0
d.			-	2	2	4	2	2.5
e.			-	4	4	2	4	3.5

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
25.		15	-	E	E	D	D	filler
a.			1	3	1	1	2	
b.			4	4	4	4	4	
c.			4	5	5	5	5	
d.			1	1	2	1	1	
e.			1	2	3	2	3	
26.	15	9	-	E	U	D	D	
a.			-	5	5	5	5	5.0
b.			-	1	1	1	1	1.0
c.			-	4	2	3	3	3.0
d.			-	3	4	2	2	2.7
e.			-	2	3	4	4	3.2
27.			D	D	D	E	D	
a.			2	3	3	1	4	
b.			3	4	5	5	3	
c.			2	5	4	4	5	
d.			3	2	2	3	2	
e.			1	1	1	2	1	

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
28.	16	11	–	E	U	D	E	
a.			–	5	4	5	4	4.5
b.			–	1	1	1	2	1.2
c.			–	2	2	2	1	1.7
d.			–	4	5	4	5	4.5
e.			–	3	3	2	3	2.7
29.	17	12	–	E	D	D	D	
a.			2	1	2	1	1	1.4
b.			4	5	4	5	4	4.4
c.			4	3	5	4	5	4.2
d.			3	4	1	2	3	2.6
e.			3	2	3	1	2	2.2
30.	18		U	D	E	D	–	
a.			–	3	3	3	1	
b.			–	2	5	4	3	
c.			–	1	1	2	2	
d.			–	4	4	5	4	
e.			–	5	2	5	5	

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
31.			–	E	D	D	D	
a.			1	3	3	2	4	
b.			1	4	4	1	1	
c.			4	5	5	5	5	
d.			1	2	1	1	2	
e.			–	1	2	1	3	
32.			–	U	D/U	U	D	
a.			–	4	5	–	3	
b.			–	2	2	–	2	
c.			–	5	4	–	4	
d.			–	3	3	–	5	
e.			–	1	1	–	1	
33.	19	13	–	U	U	D	D	
a.			–	–	5	5	5	5.0
b.			–	–	1	2	2	1.7
c.			–	–	2	4	4	3.3
d.			–	–	3	3	3	3.0
e.			–	–	4	1	1	2.0

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Number
34.	20	20	U	E	D	U	D	filler
a.			-	4	2	-	5	
b.			-	5	4	-	3	
c.			-	1	1	-	2	
d.			-	2	3	-	1	
e.			-	3	5	-	4	
35.	21	14	U	E	E	D	E	
a.			-	4	5	4	4	4.2
b.			-	5	4	5	5	4.7
c.			-	2	1	1	2	1.5
d.			-	3	3	3	3	3.0
e.			-	1	2	2	1	1.5
36.	22		U	E	D	D	D	
a.			-	4	5	1	2	
b.			-	2	3	4	4	
c.			-	3	4	5	5	
d.			-	1	1	2	1	
e.			-	5	2	4	3	

TABLE A

Responses from the Panel of Judges to the Original Items
(continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Number
37.	23		D	U	D	E	E	
a.			1	2	2	2	2	
b.			5	5	5	5	4	
c.			-	4	3	4	5	
d.			1	1	1	1	1	
e.			4	3	4	3	3	
38.	24		-	E	D	U	U	
a.			-	1	4	3	2	
b.			-	5	2	2	4	
c.			-	3	5	5	5	
d.			-	4	1	1	3	
e.			-	2	3	2	1	
39.	25	16	-	E	E	E	D	
a.			-	5	5	5	5	5.0
b.			-	4	4	5	4	4.2
c.			-	2	1	3	2	2.0
d.			-	1	2	1	1	1.2
e.			-	3	3	2	3	2.7

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
40.	26	17	-	E	D	D	E	
a.			-	4	5	4	5	4.5
b.			-	3	3	1	2	2.2
c.			-	5	4	5	4	4.5
d.			-	2	2	3	3	2.5
e.			-	1	1	2	1	1.2
41.			-	U	U	D	E	
a.			5	4	4	4	5	
b.			5	2	3	3	4	
c.			2	1	1	1	1	
d.			5	3	2	2	3	
e.			5	5	5	5	2	
42.	27	18	-	E	E	U	D	
a.			-	2	1	1	1	1.2
b.			-	4	4	3	3	3.2
c.			-	1	3	2	4	2.5
d.			-	5	5	5	5	5.0
e.			-	3	2	1	2	2.0

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
43.	28		–	E	U	D	U	
a.			3	1	2	3	1	
b.			5	4	3	5	5	
c.			1	5	5	1	2	
d.			–	3	4	2	3	
e.			1	2	1	1	4	
44.	29	19	–	E	U	D	D	
a.			–	3	2	2	2	2.2
b.			–	2	3	3	4	3.0
c.			–	5	4	5	5	4.7
d.			–	4	5	4	3	4.0
e.			–	1	1	1	1	1.0
45.	30	21	–	E	D	D	D	
a.			4	3	5	5	5	4.4
b.			1	1	1	1	1	1.0
c.			3	2	3	2	2	2.4
d.			4	4	2	4	3	3.4
e.			4	5	4	3	4	4.0

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
46.		25	-	E	U	U	U	filler
a.			-	5	4	5	4	
b.			-	2	1	2	1	
c.			-	3	5	4	5	
d.			-	1	2	1	3	
e.			-	4	3	3	2	
47.	31		-	E	D	D	D	
a.			-	3	4	3	4	
b.			-	5	1	1	1	
c.			-	1	2	2	3	
d.			-	2	3	5	5	
e.			-	4	5	2	2	
48.	32	22	-	U	E	U	D	
a.			-	-	4	4	3	3.7
b.			-	-	3	3	4	3.3
c.			-	-	5	5	5	5.0
d.			-	-	2	1	2	1.7
e.			-	-	1	1	1	1.0

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
49.	33	23	-	E	E	D	U	
a.			-	3	3	2	2	2.5
b.			-	2	5	4	4	3.7
c.			-	4	4	3	3	3.5
d.			-	5	2	5	5	4.2
e.			-	1	1	1	1	1.0
50.	34	24	-	E	E	D	D	
a.			5	4	5	4	5	4.6
b.			-	3	1	2	3	1.8
c.			1	2	2	1	1	1.4
d.			2	1	3	3	2	2.2
e.			4	5	4	5	4	4.4
51.			-	U	U	U	U	
a.			-	-	3	3	2	
b.			-	-	2	4	3	
c.			-	-	4	2	4	
d.			-	-	1	5	1	
e.			-	-	5	2	5	

TABLE A

Responses from the Panel of Judges to the Original Items
(continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
52.	35	27	–	U	U	D	E	
a.			–	–	2	3	3	2.7
b.			–	–	1	1	1	1.0
c.			–	–	4	4	4	4.0
d.			–	–	5	5	5	5.0
e.			–	–	3	2	2	2.7
53.	36	26	–	E	E	U	U	
a.			–	3	1	1	2	1.7
b.			–	2	2	2	3	2.2
c.			–	4	4	3	4	3.7
d.			–	1	3	1	1	1.5
e.			–	5	5	5	5	5.0
54.	37		–	E	D	D	D	
a.			2	3	1	2	1	
b.			–	5	3	3	3	
c.			4	4	4	5	5	
d.			–	3	5	2	2	
e.			1	1	2	1	4	

TABLE A

Responses from the Panel of Judges to the Original Items
(continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
55.		30	-	E	U	D	D	filler
a.			5	5	4	5	5	
b.			1	1	1	3	1	
c.			?	4	3	2	3	
d.			1	2	2	1	2	
e.			5	3	5	4	4	
56.			-	E	U	U	D	
a.			5	5	5	-	5	
b.			1	1	2	-	1	
c.			1	3	3	-	4	
d.			1	2	1	-	2	
e.			5	4	4	-	3	
57.	38	28	-	E	D	U	D	
a.			-	4	4	-	4	4.0
b.			-	3	1	-	1	1.7
c.			-	1	3	-	3	2.3
d.			-	5	5	-	5	5.0
e.			-	2	2	-	2	2.0

TABLE A

Responses from the Panel of Judges to the Original Items (continued)

Original Number	Revised Number	DAS Number	Judges' Responses 1	2	3	4	5	Average Weight
58.	39	29	D	E	E	D	D	
a.			3	1	3	4	3	2.8
b.			5	5	5	5	5	5.0
c.			3	2	4	3	4	3.2
d.			-	3	1	1	1	1.2
e.			4	4	2	2	2	2.8
59.			-	U	U	D	U	
a.			-	-	5	2	1	
b.			-	-	1	5	4	
c.			-	-	4	4	2	
d.			-	-	3	5	5	
e.			-	-	2	4	3	
60.	40		-	E	D	D	E	
a.			4	4	5	4	3	
b.			5	5	4	5	4	
c.			2	3	3	2	5	
d.			4	2	1	1	1	
e.			-	1	2	3	2	

Note. 8 accepted items with all 5 judges responses

12 accepted items with 4 judges responses

4 accepted items with 3 judges responses

APPENDIX B

THE TEST BATTERY AND CONSENT FORMS

A Competitive Sport Scale of Self Expression[b]

Directions:

The items on the following pages are situation-response items related to how an athlete expresses her/himself in the competitive sport setting. Read each situation carefully. Then read the five responses which indicate possible actions toward the situation. Put yourself in the situation described and indicate how you would respond to the situation described, not how you think you should respond by placing an "X" in the space to the left of the appropriate response. Only one response is to be marked, but be certain you have responded to each situation. For example:

1. I hold a reserved ticket for my favorite sporting event only to find that another spectator is sitting in my seat. I would:

__X__ a. request that the spectator check her/his ticket and then move
____ b. blow my stack and demand that he/she move immediately
____ c. ask for a ticket check of spectators in the immediate vicinity
____ d. look for an usher to handle it as that is what he/she is there for
____ e. look for another seat and avoid the hassle

ITEMS

1. I am playing a closely contested match in racketball. I would:

____ a. direct shots to my opponent's weaknesses as that seems the best strategy
____ b. hit my opponent with the ball on the way to the front wall to get a replay on my weak shots
____ c. hit the ball onto the front wall so it deflects off and hits my opponent so he/she will not have time to return my shot
____ d. continue to play my own game
____ e. directs shots to my opponent's strengths because that challenges me most

2. My coach or teammates compliment me for making an extraordinarily fine play/shot. I would respond by:

____ a. becoming embarrassed and muttering an unintelligible reply
____ b. acting as though it happens all the time
____ c. thanking her/him/them and hoping that I will be that successful again
____ d. thanking her/him/them and proceeding to explain and demonstrate just how it happened
____ e. stating that I couldn't have done it without their help

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[b]The Dailey Assertion Scale

3. My opponent does not call a penalty stroke on her/himself when accidently moving the golf ball with his/her club prior to teeing off. I would:

____ a. call it to my opponent's attention
____ b. call it to the official's attention
____ c. let it go because I have had the same thing happen to me
____ d. keep a close eye on my opponent so it doesn't happen again
____ e. hit my own tee shot as far as I could to vent my frustration

4. I am facing a particularly formidable opponent. I would:

____ a. tell myself I'll never beat her/him/them, but I'll give it my best shot
____ b. tell myself no matter what happens, I am the one who has to live with myself, so no one but me is ultimately responsible for my actions
____ c. tell myself no matter how I have performed in the past against her/him/them, I'll play my best because this opponent brings out my best
____ d. stretch the rules as far as I can to make certain I'll get a fair shake because my opponent plays this way
____ e. tell myself I am going to beat her/him/them even though I have always been beaten by her/him/them in the past because my luck is bound to change

5. My coach requests that I list my long-term objectives for workouts. My ultimate goal is to:

____ a. set new records so I will become well known in my sport
____ b. vary the workout so it doesn't become boring and I can get on with playing the game
____ c. go as far as I can go both physically and psychologically
____ d. play it safe so I don't injure myself physically and/or psychologically
____ e. make workouts as productive as possible so I can achieve the most in the least amount of time

6. I have to state my preferences for the college yearbook as to how I would like to be remembered as a team member. I would prefer to be remembered as:

____ a. the play maker
____ b. the assister
____ c. the record breaker
____ d. the most consistent
____ e. the first substitute

7. My opponent is beating me in a closely contested match. I would:

____ a. continue to play my own game
____ b. occasionally call shots out of play that are in play
____ c. attempt to keep my cool so I have an even chance at winning
____ d. vent my frustration by throwing my racket/club/bat down
____ e. take a few more risks than I normally would

8. There are many types of coaches. I perform best for the coach who:

____ a. makes all the decisions so I can concentrate on the game/match/meet
____ b. leaves all of the playing decisions up to me once the game/match/meet starts
____ c. leaves all of the decisions up to the team at all times
____ d. makes the decisions in the crucial parts of the game/match/meet
____ e. leaves the playing decisions up to me in the crucial parts of the game/match/meet

9. I have come late to practice for the third practice in a row. I respond best to the coach who:

____ a. is consistent however he/she handles the situation
____ b. gives me the silent treatment
____ c. chews me out and forgets it
____ d. has the team captain handle it
____ e. gives me additional practice experiences

10. I am asked to justify the importance of game rules. I explain that they are important because they:

____ a. allow me to play within a well-defined structure
____ b. allow me to see just how far I can go before a foul is called
____ c. are made to be broken under certain circumstances
____ d. are there for me to interpret as I see fit
____ e. are there to represent the "spirit and intent" of the game

11. The press requests that I describe my style of play. I would respond that:

____ a. I have competed more or at a higher ranking because I take the initiative
____ b. I have not been used as much because I just don't make things happen
____ c. I have been known to be a bit erratic at times
____ d. I can be counted on to keep my cool, but if somebody beats me out I try that much harder not to let it happen again
____ e. I have been known to be a bit verbal/physical at times when the situation calls for it

12. My coach comes to me for a decision on whether to schedule a match/game/meet against a team which has in the past exhibited all kinds of unethical practices when we have competed against them. I would respond:

____ a. "Every team cheats to some extent if they know they can get away with it, so why not?"
____ b. "There is no way I want to compete against them again, so let's not schedule them."
____ c. "How do you and the rest of the team feel about it?"
____ d. "Why do you even bother to ask me when you know how strongly I detest playing them?"
____ e. "You and the team captains make the decision."

13. I seem to get along well with most athletes. However, there are some who really bug me because they:

____ a. make excuses for playing poorly when they should just admit it and correct their errors
____ b. feel guilty about playing rough or taking unnecessary risks to score
____ c. depend too much on me to make things happen
____ d. complain to the coach or referee that they are being fouled
____ e. draw fouls or penalties because they don't have the necessary skills or body control to do otherwise

14. My team is extremely far behind in a game/match/meet. I would:

____ a. hang in there no matter what
____ b. try harder to perform better
____ c. become angry and openly display my frustration
____ d. be patient and wait for opportunities to turn the game/match/meet around
____ e. chalk it up as one of those game/match/meet experiences

15. I have obviously inaccurately assessed my opponent's strengths/weaknesses. I would:

____ a. make excuses for my poor performances
____ b. own up to my mistakes and seek help in reversing the situation
____ c. own up to my mistakes, but try to figure out for myself how to reverse the situation
____ d. blame it on my coach and teammates for not helping me
____ e. blame it on my own inexperience

16. Many situations exist in sport for self expression. My expression of assertiveness takes the form of:

____ a. directly asserting myself by taking the initiative whenever possible
____ b. asserting myself within the rules of the game
____ c. asserting myself indirectly by doing it through others or in an indirect manner
____ d. just being myself which doesn't require any assertiveness
____ e. asserting myself by using my equipment or apparatus effectively

17. The announcer or scorekeeper inadvertently reports my score/time incorrectly. I would:

____ a. bring it to her/his attention immediately
____ b. let my teammate or opponent correct it
____ c. notify the tournament official in charge
____ d. not worry about it as it will eventually be corrected
____ e. let it go unless he/she repeatedly goofs

18. I seem to be the only one who doesn't agree with the strategy decided upon for playing a certain opponent. I would:

____ a. play my game plan no matter what
____ b. seek a compromise
____ c. give in as the majority rules
____ d. find out what is wrong with my game plan
____ e. listen to what my teammates have to say, but stick with my plan

19. I am competing against my favorite opponent. My motto is:

____ a. "winning is the only thing"
____ b. "nice gals/guys can finish first"
____ c. "let's give her/him/them our best"
____ d. "I'll really be up for this game/match/meet"
____ e. "I'll have to get a good hate on"

20. A teammate continually takes the credit for a team's/squad's successful performance. I would:

____ a. really become upset because no one player is that good
____ b. tell anyone who would listen that so-and-so is a big showoff
____ c. let that player know it was a team effort
____ d. give my teammate's locker a good swift kick
____ e. feel it is justified because he/she is our best performer

21. I feel that I am being discriminated against because I am a participant in a so-called minor sport. I would:

____ a. seek help from those who are in a position to change things
____ b. bow to the desires of the administration
____ c. not be swayed by attendance and/or budgetary considerations
____ d. let those offending me know in no uncertain terms exactly how I feel
____ e. bring Title IX or its equivalent to the appropriate administrator's attention

22. I am having one of those days when nothing I do on the court/field/course seems right. I would tell myself:

____ a. everyone is entitled to a bad day now and then
____ b. no one is perfect--I just couldn't seem to get it together today
____ c. even the best performers can't be up all the time
____ d. today is like any other day, my equipment just didn't feel right
____ e. it wasn't my fault, I never play well on this field/court/course

23. I have played my very best. My reward takes the form of:

____ a. seeing my name in print
____ b. receiving the praise of others
____ c. being high scorer, etc.
____ d. feeling the warm glow of success for my individual as well as my team's efforts
____ e. not having to practice the next day

24. An athlete complains for not having enough playing time. The best way for a coach to handle this is to:

____ a. reassess the athlete, and if her/his play warrants it, play her/him more
____ b. exert her/his authority and tell the athlete that he/she knows what he/she is doing
____ c. make practice sessions harder for this athlete
____ d. compromise--if he/she practices harder, he/she will play more
____ e. tell the athlete that when her/his performance improves, he/she will play more

25. My mind sometimes tends to wander during practice. My coach quickly brings me back to reality by stating:

____ a. "Tell me what I just said!"
____ b. "What do you think I am running here, a kindergarten?"
____ c. "What do <u>you</u> think I am trying to get across to you?"
____ d. "Let me know when I am boring you, and I'll try to make practices more interesting."
____ e. "Now look, if you can't pay attention, you can get your tail out of here!"

26. I am preparing myself for a game/match/meet. The procedure which works best for me is to:

____ a. wear my lucky hat, socks, suit, etc.
____ b. consider my opponents as the enemy
____ c. get away from everyone connected with the sport before game time
____ d. rely on my coach or teammates to do it
____ e. go through the same preparation that I always do before game time

27. I recognize the need for an Athlete's Bill of Rights which would legally guarantee the opportunity for any man or woman to select participation opportunities according to the nature, needs, and desires of the individual. This would require that I:

____ a. seek the aid of the federal government, but not its control
____ b. forget the whole thing as there is little hope for such change
____ c. allow the N.C.A.A. and the A.I.A.W. governing boards to handle it
____ d. seek the aid of my fellow college athletes to present a united front
____ e. make allowances for the slow wheels of progress toward such change

28. A controversial subject comes up in a team discussion concerning how to handle athletes who break training rules. I am known for:

____ a. presenting the opposite side of the argument
____ b. staying out of the argument altogether
____ c. supporting the popular viewpoint
____ d. expressing my views without alienating everyone
____ e. becoming sidetracked in my argument so I am often interrupted

29. I am trying to convince my conservative coach that a more imaginative strategy might win more games/meets/matches. To effect such change, I would:

____ a. try to get my teammates to voice their support
____ b. suggest changes to the coach in private
____ c. try to get my team captain to talk to the coach
____ d. voice my displeasure to the coach in practice
____ e. suggest changes to the coach in writing

30. The trainer suggests that medication is necessary for me to play. I would respond by:

____ a. requiring adequate information about the medication before deciding to take it
____ b. taking it without question as the trainer should know what he/she is suggesting that I take
____ c. refusing to take medication of any kind
____ d. refusing to take it until I see how my other teammates respond
____ e. requiring an outside medical opinion before taking it

Player _____

Player/Coach Evaluation

Directions: Please rate all of your teammates/players (each on a separate sheet) on how you feel they generally express themselves in the competitive sport setting. Respond to the following ten situations by circling the appropriate number from 5 to 1 (Almost Always or Always, 5; Usually, 4; Sometimes, 3; Seldom, 2; Never or Rarely, 1). Be certain to rate all ten items for each individual teammate/player.

5 4 3 2 1 1. This individual takes the credit for a team's successful performance.

5 4 3 2 1 2. This individual becomes embarrassed when complimented for performing well.

5 4 3 2 1 3. This individual gives 100% whether her/his team is winning or losing.

5 4 3 2 1 4. This individual resorts to teasing, insulting or baiting an opponent in an effort to achieve success.

5 4 3 2 1 5. This individual freely expresses her/his opinions, feelings, and attitudes in team discussions, and/or before the media.

5 4 3 2 1 6. This individual has been warned by coaches and/or officials for flagrantly violating the "spirit and intent" of the rules.

5 4 3 2 1 7. This individual accepts criticism well from teammates and coaches.

5 4 3 2 1 8. This individual readily adapts to the ups and downs of competitive performance.

5 4 3 2 1 9. This individual takes the initiative whenever possible to put her/his team in the lead.

5 4 3 2 1 10. This individual makes excuses for poor performance.

APPENDIX C

NOMOGRAPH FOR ESTIMATING THE CORRELATION BETWEEN AN ITEM AND THE TOTAL TEST

APPENDIX D

RAW DATA

Raw Data

ID	SEX	DAS	CSES	SDS	TEAM	COACH
1	2	93.4	96	22	30.0	30
2	2	96.5	125	8	31.0	38
3	2	92.1	138	11	28.7	27
4	2	92.8	124	17	33.0	30
5	2	93.4	126	11	29.8	28
6	2	87.5	102	9	30.2	28
7	2	96.4	158	17	29.0	34
8	2	80.2	112	16	30.4	31
9	2	104.0	142	15	35.4	39
10	2	92.5	130	15	28.0	27
11	2	100.4	135	8	29.4	35
12	2	85.3	137	7	29.7	33
13	2	87.9	138	16	25.5	33
14	2	87.7	113	21	30.5	33
15	2	86.6	115	7	25.5	32
16	2	90.3	104	14	25.7	31
17	2	86.0	130	9	29.0	30
18	2	107.4	172	9	31.0	35
19	2	87.2	120	19	40.0	38
20	1	87.7	131	14	34.3	31
21	1	89.6	120	26	34.7	35
22	1	95.2	140	19	33.3	33
23	1	86.0	92	13	32.7	33

Raw Data

(continued)

ID	SEX	DAS	CSES	SDS	TEAM	COACH
24	1	97.5	151	16	28.0	30
25	1	91.5	82	8	33.5	30
26	1	87.5	109	10	31.9	29
27	1	89.7	92	13	32.1	27
28	1	88.6	110	14	36.0	37
29	1	94.7	103	17	33.0	29
30	1	97.1	97	22	34.1	27
31	1	92.2	110	23	32.7	36
32	1	104.7	141	19	28.8	26
33	1	81.8	114	11	33.0	31
34	1	94.1	134	19	33.5	30
35	1	100.0	134	22	30.5	30
36	1	82.0	87	21	31.7	31
37	1	97.8	158	17	30.0	35
38	1	90.3	104	8	31.5	29
39	1	100.4	95	21	32.7	34
40	1	90.2	96	17	31.9	30
41	1	96.9	119	17	34.4	39
42	1	103.9	116	8	30.9	30
43	1	86.8	133	6	31.9	37
44	1	87.6	105	22	34.3	39
45	1	91.5	104	10	32.6	38

Raw Data

(continued)

ID	SEX	DAS	CSES	SDS	TEAM	COACH
46	1	100.0	87	17	35.9	40
47	1	101.6	145	13	32.7	34
48	1	98.3	106	14	31.8	34
49	1	103.3	131	12	28.3	27
50	1	92.5	90	21	31.3	35
51	1	97.2	91	12	29.1	29
52	1	88.7	93	7	29.9	33
53	1	79.3	105	14	31.7	35
54	1	105.6	89	12	34.8	36
55	1	90.0	96	20	31.7	31
56	1	98.2	126	21	30.7	34
57	1	105.2	116	20	33.3	34
58	1	78.8	133	10	31.0	32
59	1	90.1	142	8	32.2	34
60	1	103.0	137	23	31.4	28
61	1	96.8	124	16	33.2	35
62	1	94.3	126	20	34.0	34
63	1	89.7	114	17	31.2	35
64	1	97.7	118	7	31.0	31
65	1	104.3	146	17	33.0	29
66	1	98.9	109	6	31.7	29
67	1	98.0	137	6	25.5	33

Raw Data

(continued)

ID	SEX	DAS	CSES	SCS	TEAM	COACH
68	1	95.0	140	20	31.9	33
69	1	89.4	138	8	26.6	28
70	1	97.5	119	23	31.8	35
71	1	94.4	90	8	33.1	34
72	1	97.7	98	13	31.0	34
73	1	92.2	125	12	27.6	32
74	1	86.7	116	20	31.5	36