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The development of early projective techniques was strongly influenced by the psychoanalytic movement. According to Rabin (1986), clinical psychologists, pre-1930, had few assessment tools (e.g., the Stanford-Binet, and some personality inventories of limited range). Essentially, the clinicians of this era mainly used quantitative indices, IQ tests, percentiles on introversion or dominance scales, and similar pieces of nomothetic information. Rabin suggested the introduction of projective techniques gave clinicians the opportunity to communicate something meaningful to professional colleagues about the personality structure, dynamics, and diagnoses of clients. Results from projective techniques also contributed to the planning of therapeutic processes. According to Rabin, the clinical tradition provided a setting for the development of projective techniques, and today projective techniques remain favored instruments of many clinical psychologists, and common methods of assessing personality.

As early as 1907, a simple projective test consisting of a series of pictures was available for personality assessment of children. Since the early 1900s, the use of psychodynamically driven personality tests have waxed and waned. For example, in the 1920s and 1930s there were groundbreaking developments such as the Rorschach Ink Blot Test (Rorschach, 1921) and the Thematic Apperception Test (TAT; Morgan & Murray, 1935). These classic early personality tests, which have stood the test of time and are still widely used, have spawned a huge number of derivative tests. A gradual shift took place when the development and popularity of self-report tests led to a reappraisal of, and in some instances skepticism towards, older projective methods. During the 1950s, many psychologists were strident in asserting that projective techniques did not meet established psychometric criteria of reliability and validity.

The popularity of sport psychology as a specific discipline has largely coincided with an era dominated by objective (self-report) testing (1960s to present). Like mainstream psychologists, some sport psychologists use various tests and techniques to assess personality. The many instruments that have been developed to assess personality in sport are essentially objective/self-report. With the increasing maturation of the field of sport psychology, there appears to be a greater appreciation for diversity of training models, research methodologies, and other approaches beyond the dominant cognitive-behavioral paradigm. For example,
psychodynamic interpretations and formulations have begun to appear more frequently in the sport psychology literature (Andersen, 2005; Strean & Strean, 1998).

**Historical traces and theoretical foundations**

Freud introduced the term *projection* as early as 1894. He stated that projection is a process of ascribing one's own drives, feelings, and sentiments to other people or the outside world as a defensive tactic that allows one to remain unaware of these undesirable phenomena in oneself. Murray (1938) first introduced the term *projection test* in a groundbreaking study titled *Explorations in Personality*. The term is the generic label for a collection of varied psychological assessment tools. This collection includes inkblot methods (e.g., Rorschach), storytelling methods (e.g., TAT), drawing techniques (e.g., human figure drawing, house–tree–person), and verbal stimuli techniques (e.g., sentence completion, word association). Murray described these methods as, “an attempt to discover the covert (inhibited) and unconscious (partially repressed) tendencies of normal persons ... simply different methods of stimulating imaginative processes and facilitating their expression in words or in action” (p. 248).

One of the most accepted and widely used projective tests to investigate the dynamics of personality is the TAT (Morgan & Murray, 1935), which involves a psychodynamic process of interpretation. Using the TAT in a therapeutic setting enables clinicians to gain insights into how the dynamics of personality are manifested in interpersonal relations, and how clients describe and interpret their environments. The TAT consists of 30 cards (and one blank card) with the majority of images depicting people in a variety of life situations. Clients are asked to interpret the scene by identifying the central (main) character, telling what is taking place, describing the thoughts and feelings of the characters, recounting events leading to the scene, and telling what the outcome will be. Clients reveal their personal apperception of the images through the medium of *projection*. They project onto the images their own hopes, dreams, fears, frustrations, relationships, and so forth.

**Interpreting projective tests**

Clinicians working with the TAT differ in how they use the tool as source material for finding characteristics of their clients they believe are significant. For example, a clinician may use the TAT solely to determine diagnostic characterizations of behavior, or to locate important emotional relationships in a person’s world. According to Rotter (1946), interpretations from the TAT should be considered only as hypotheses or leads for further investigation, and “the value, significance, nature, and validity of the tests are dependent upon the interpreter, his experience, and his approach to the field of personality” (p. 206).

Interpretation can include identifying the “degree” of projection (how much projection is going on) and complementing responses with case notes of interactions with clients. Adcock (1965) suggested that practitioners should appreciate the difficulty of interpreting the degree of projection involved in a client’s storytelling. Adcock warned against practitioners relying on mere counting of needs and conflicts and being too concerned with group averages. The interaction between the clinician and client is also a central component of the interpretation process and understanding the degree of projection.
The problem with most projective tests is always the same; they allow the interpreter to project as much as the client. Interpretation of respondents’ stories requires clinicians to be highly aware of their own needs and projections. Similarly, transference and countertransference also play important roles in the interpretation of clients’ stories. Eron (1959) suggested there is a tendency to distort in storytelling due to the effects of transference. For example, clients may make conscious (or unconscious) efforts to please practitioners and present themselves as specific kinds of persons. There may also be a tendency for practitioners to misinterpret the meaning of stories due to a lack of awareness, or analysis, of their own countertransference. If clients have some behaviors or personality features that remind practitioners (unconsciously) of others in the past who have disappointed them, then there may be a tendency to interpret the stories in a more negative light than if clients remind professionals of positive past experiences with significant others.

Validity and reliability

Projective tests have been a matter of concern to psychometricians because they generally do not conform to the usual methods of establishing reliability and validity. Critics have pointed to validity problems (or limitations) of projective tests especially when interpretation is not based on quantified scores or normative data, and have dismissed their usefulness as personality assessment techniques. According to Jensen (1959), “if the TAT is short on actual validity, it certainly is not lacking in what might be called subjective validity (akin to faith validity)” (p. 312). Jensen suggested some psychologists have greater capacities than others for experiencing subjective validity. This capacity seems to be associated with training and experience in psychoanalysis, psychotherapy, and projective techniques in general. Jensen also asserted that one reason for the survival of the TAT in clinical practice is this subjective validity. “While research has shown the TAT to have low reliability and negligible validity, many clinical psychologists continue to use it, apparently with some satisfaction” (Jensen, 1959, p. 313). Applying the rules of quantitative test validation to projective tests, however, is actually a misapplication. Trying to fit the TAT into a quantitative psychometric mode is akin to applying quantitative positivist paradigms to qualitative research such as ethnography and life histories. It’s an unfair comparison, and it misses the point that projective tests are clinical instruments designed to help us understand people.

Projective assessment in sport

There is a prevailing trend in sport psychology to focus on observable and self-reported traits of athletes. According to Apitzsch (1995), trait theory and social learning theory have received the most attention in sport personality research, whereas, little attention has been given to psychodynamic theory. An advocate of psychodynamic therapy for athletes, Cratty (1989), suggested that the interpretation of athletes’ dreams is useful in conjunction with projective tools to “assess such concepts as achievement needs in sports, aggressive reactions to frustrating sports situations, and perhaps anxiety in sporting contexts. Projective tools have existed for decades, but they were not designed with the specifics of sport in mind” (p. 37). The interpretation of projective tests, according to Cratty, may differ depending on the tester and test environment. Individuals may also fluctuate in their responses to visual
stimuli depending on external factors during administration. These differences and fluctuations, however, are useful because they may provide a great deal of information for the clinician. As Cratty stated, “Projective tests give breadth and depth to clinical psychology. Fortunately, they are not dead” (p. 36). Although Cratty appears pleased that projective tests have not died, these tests have been in a serious slumber.

Although projective testing is rarely mentioned in the sport psychology literature, a few researchers have attempted to develop projective tests specifically for athletes (Bouet, 1970; Missoum & Laforestrie, 1985). Bouet, and Missoum and Laforestrie, are among the few sport researchers to show concerted interest in the development of projective tests for sport and the application of projective tests to an athlete population. Bouet developed a sport-specific version of the TAT, the Projective Sport Test (PST). In a similar study, Missoum and Laforestrie developed the Projective Test for Sportspersons (PTS) as a part of a psychological assessment battery adapted for athletes. The PST was also designed to aid in the selection and training of sports personnel. The Bouet study and Missoum and Laforestrie’s test development provided evidence that in sport psychology there was at least “latent” interest in projective methods. Their efforts, however, were incomplete and neither drove research in the area to a point of applied use for practitioners, or to any significant academic journal publication. Bouet’s PST is referenced in the Directory of Psychological Tests in Sport and Exercise Sciences (Ostrow, 1998) and stands as the only psychodynamically themed test of the 314 tests listed. Bouet’s test and administration material, however, are not available.

There have been few serious attempts over the last 20 years to develop a projective test for use in a sport context. Although there are some prevailing opinions on the usefulness of a sport-specific projective test, a few sport psychology researchers have found projective tests to be, at least, useful means of gathering information. For example, Benzi and Michelini (1987) administered a series of projective tests with the aim of describing the psychological profiles of artistic roller skaters. Johnson, Hutton, and Johnson (1954) also attempted to describe and measure the personality traits of “champion” athletes using projective tests. Although these two examples demonstrate some applications of projective tests in sport, further examples of researchers using projective tests in sport settings are extremely rare. Often the criticism of using projective tests focuses on the belief that information is based on dated research and literature. In particular, the criticism that arises from sport researchers and clinicians is often sourced from information found outside of the sport literature. Projective tests are readily available as sources of complementary information but not as an all-encompassing answer to personality dynamics. Clinicians may expect too much from this one source rather than taking a projective test as part of a battery of personality assessment tools (a holistic view of assessment).

There remain differing opinions regarding the use of projective techniques in sport psychology service delivery (e.g., Cox, 2007; Cratty, 1989). These differences appear to revolve around two primary points: (a) the value of the instruments as tools in collecting information about athletes that is not easily obtained with self-report techniques, and (b) the psychometric adequacy of the instruments. In specific reference to point (b), opponents focus on psychometric inadequacies of projective techniques, and proponents focus on the potential usefulness of such instruments. Proponents also point out that projective techniques allow considerable freedom for clients to generate responses that provide information about their psychological constitutions.

Projective tests are attractive as clinical tools, but they are often difficult to score and interpret. Projective tests were, however, not originally designed or intended for quantitative studies.
Cratty (1989) suggested that they provide insightful information for psychologists and researchers, but are not suited for statistical inferences for athletic populations; rather, “they are tools for clinical psychologists and psychiatrists who are both intuitive and expert.” (p. 36). Essentially, the use of projective tests gives practitioners a means to gain insight into a patient’s innermost feelings and current conflicts and needs. Cox (2007) maintained a more traditional psychometric approach to sport psychology assessment. According to Cox, projective techniques are “unstructured,” allowing people to be open and honest in their responses. He suggested that projective methods are not often used by sport psychologists, but that is not to say they should not be used. In reference to the TAT in particular, Cox suggested, “its validity and reliability are highly dependent upon the skill and training of the individual administering and interpreting the results” (p. 26). In the field of projective testing, problems of validation are particularly salient. Anzieu and Chabert (1960) maintained that projective tests, “do not explore a single variable, but describe an individual in terms of a dynamic system where the variables themselves are in inter-correlation” (p. 217). Projective tests do, however, provide an alternative to nomothetic approaches to assessment.

Although there has been widespread resistance to projective tests in sport psychology (and to some extent the psychological community as a whole) since the 1950s, the premise that projective tests use has limited application is questionable. According to Lazarus (1989), all assessment and treatment of human problems should be holistic, or totalistic, as exemplified by multimodal therapy. Multimodal therapy involves an assessment of the individual using the integration of different but interrelated modalities, or psychological parameters (e.g., behavior, physiology, cognition, interpersonal relationships, sensation, imagery, affect). In other words, the use of multiple assessment tools and divergent theoretical approaches when assessing an individual can only enhance the understanding of the individual’s needs, motives, and drives.

In describing personality, psychologists have relied heavily on developing, administering, and interpreting personality tests and techniques. It is difficult to measure personality directly, but projective tests provide an opportunity for people to describe their feelings and thoughts about a range of stimuli. For example, someone might be shown a photo of an exhausted runner crossing a finishing line at the end of a track race and be asked to write about what is happening. A high-achieving, confident person might emphasize how the runner made an effort to achieve a goal, whereas a low-achiever might project feelings of disappointment at losing the race in a close finish. An athlete can answer any pencil and paper tests, or interview questions (objective/self-report methods) with verbal and conscious decisions. There may be, however, unconscious motives and conflicts that cannot be measured on self-report inventories. A well-trained and intuitive clinician may pick up the conflict through discussion, but projective methods can be effective techniques to assist the athlete in (unconsciously) sharing such information.

The Athlete Apperception Technique (AAT)

The construction of the Athlete Apperception Technique (AAT; Gibbs, Marchant, & Andersen, 2005) followed the developmental model of the TAT. An important element in the construction of any projective test is the creation of a unique and suitable image set that goes beyond a pictorial view of traditional family/associate relationships. The AAT represents a new technique that practitioners can use to dynamically produce an
idiographic understanding of athletes’ and coaches’ characteristics, motivations, anxieties, and dreams.

The two specific aims of the development of the AAT were to: (a) create a sport image set using past expert-driven guidelines as a blueprint, and (b) investigate potential interpretive methods. The first aim was completed by following a process that included collating a large set of sport images, trialing images with a large and diverse sample of athletes, using experts to judge the appropriateness of images, engaging a professional artist to recreate images, and carrying out additional testing to achieve a small and workable image set. Following the progressive reduction of a large number of sport images, this work has culminated in three general image sets: (a) an adult image set (AAT), (b) a supplementary set (AAT-S), and (c) a children’s set (AAT-C). The AAT includes 10 images that evoke a range of sport-related themes and latent stimulus properties such as relationships with other athletes and coaches, anxiety and arousal issues, concentration, leadership, team cohesion, preparation and routines, flow and optimal performance, confidence, motivation, attributional styles, and self-talk. The AAT-S (5 images) provides an option for sport psychologists to choose supplementary images that evoke specific themes such as apprehension over body contact, vulnerability, arousal-aggression, faith, boasting or gloating, and conflict. Between the AAT and the AAT-S, many themes can be evoked, and I believe future research will
demonstrate the depth and breadth of themes and stories that these images can produce. The AAT-C images (appropriate for children–adolescents) evoke stories reflecting sport development and barriers to sport involvement themes. Considerable data have been collected for each image set, but to date, exclusively with adults (Gibbs, 2006). Additional research on the AAT-C images with children is needed.

**AAT image interpretation example**

The following section is an example of a typical story response to an AAT image (Image 6; see Figure 11.1) followed by two forms of analysis: a sport psychology interpretation and a dynamic interpretation. It is important to note that the case example used here is somewhat limited because I had no life history or background information for the respondent (other than gender, age, and sport participation) and such limited knowledge, and lack of dialogue, greatly restricts attempts to interpret this respondent’s stories. The interpretations of just one image (of 10 images administered) is presented here for illustrative purposes only.

The participant, Jenny, 19-year-old female basketball player, responded with this story for Image 6:

This is a group of kids, and a couple of them look to be either brother or sister or very close friends. They look like they are about to play soccer. At the moment it looks like they are having trouble picking the teams. This is because they all don’t agree it is fair. The boy with his leg on the ball is the oldest, and he has the responsibility of picking the next player, but he can’t decide because the two players left don’t look that good. One of the players to choose from is his sister, and he wants to pick her because he doesn’t want her to be the last picked, but the problem is that she is shit at soccer. He knows he is the best player and wants to have the best team, but the problem is that she is shit at soccer. He wants to make a decision that would satisfy all the other children. There was also some conflict for Jenny with the boy’s responsibility of picking the next player and feeling that although the girl (the central character’s sister) is not good at soccer, there is some pressure to choose her. Questions may be raised and discussed with Jenny regarding issues such as shouldering the responsibility for others’ happiness, and why she interprets the central character’s decision as important for his and others’ enjoyment. Also interesting to examine with Jenny would be the conflict of wanting to “have the best team,” “being fair,” and pressure to choose his (her) sister even though “she is shit at soccer.” Jenny’s response integrated feelings of inclusion–exclusion, rejection, and a strong relationship with a sibling.
**Dynamic interpretation**

Jenny’s story, at first read, seems to be about the older, dominant boy, but Jenny probably identifies with the sister who is “shit at soccer.” Given themes evident in Jenny’s responses to the other images, she likely identifies with the incompetent young girl who makes mistakes, who is a loser, but who wants to be chosen and have a go. The older competent boy may represent an actual older sibling, or if Jenny does not have an older sibling, then he may represent a fantasized older brother whom she wanted to have around and admire (like some of her other female friends probably had growing up). I did not have a family history on Jenny, so these thoughts are quite speculative. This story may be about wanting to be “chosen,” and that desire holds all sorts of possibilities (to be loved, to be valued). Those needs to be chosen and to be valued are thwarted because she is not any good at what she wishes to be chosen for. Jenny may feel that worthiness, attention, and love are contingent on playing well, and she knows she does not have the skills that equate to that worthiness. The older, admired (he is the “best” player) brother is a positive authority figure, but he is caught up in the values of sport (he wants the best team) and cannot make a decision between brotherly protection (he does not want her to be the last one chosen) and being the best. I think the central theme of this story is that there is no solution for Jenny. She may see no way out of her desire for love and her perceived lack of the qualities (sport skills) that she believes will bring her to that special status of being “chosen” and loved. Jenny may be stuck with no way out. It all comes to naught, and then we just go home (for tea, in this story).

The above is a brief example of how someone with a psychodynamic orientation might begin to analyze Jenny’s responses. For many in sport psychology, this territory would be rather foreign, and some might even say that this approach is really just spinning Freudian fairy tales. I would disagree and suggest that this approach may be helpful if an athlete, such as Jenny, wants to do some deeper exploration of her life, rather than learn some relaxation for her competition anxiety.

Thoughtful analysis and interpretation of AAT responses may provide an in-depth and idiographic understanding of athletes’ characteristics, motivations, and anxieties, as well as assisting in the assessment of personality features. At the very least, discussion of AAT responses can be a useful way of initiating dialogue, engaging the client, and possibly unmasking issues that might otherwise lay dormant (latent personal issues, of which athletes may not be consciously aware, or which they may be reluctant to voice openly). Further, the use of the AAT may help sport psychologists identify and assess personality features relevant to performance and the health and wellbeing of athletes. The AAT should not be used as a stand-alone instrument, but rather in conjunction with other sources of information (e.g., questionnaires, intake interviews, ongoing service delivery encounters).

The AAT may also become a useful tool in educational settings, and academics in sport psychology programs may find it to be an instructive and challenging tool in the education of applied sport psychology students. The AAT may also assist educators in providing some balance, in regard to the dominance of paper and pencil self-report measures, when discussing personality assessment administration, analysis, and interpretation.

**Conclusions**

In athlete–sport psychologist encounters, the aim is not to judge athletes’ personalities, but to explore and embrace their lives. When used judiciously, projective techniques may be of
assistance in revealing athletes’ worlds. The AAT, for example, is not a technique designed to predict success in sport, identify leadership skills, measure anxiety, or assign a range of values to explain personality. The AAT follows the developmental and theoretical guidelines of the TAT, and to that extent, is designed to assist sport psychologists in understanding their athletes’ motives, attributions, wishes, dreams, conflicts, and desires, and in some ways may help practitioners better serve the people in their care. See Box 11.1 for the main take-home messages from this chapter.

References


