

MOTIVES, VALUES, PREFERENCES INVENTORY

M A N U A L

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Motives, Values, Preferences Inventory Manual

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CHAPTER 1

Conceptual Background

INTRODUCTION AND DEFINITIONS

R. S. Peters (1958) points out that we use motivational terms to explain social behavior and argues that motivational terms are explanatory concepts, *par excellent*. Peters also distinguishes between two categories of motivational terms—causes and reasons—each of which is used to explain social behavior. Causal explanations refer to processes (biological or physiological drives) inside people that somehow propel them into action. Reasons as explanations refer to people's intentions, goals, and preferences; reasons are mental or intrapsychic constructs that explain the direction and focus of people's actions. Although many people regard needs or drives as primary, Peters (1958) notes that the concept of need or drive postulates a mysterious end-state of satisfaction or tension reduction that is never measured or observed. He goes on to argue that, for most everyday purposes, we explain a person's behavior in terms of what he or she intends by a course of action. Thus, interests, goals, values, and preferences have a unique role to play in the explanation of social action.

Hogan and Blake (1996)¹ regard needs, values, and interests as closely related concepts. Distinguishing among them seems to be a matter of semantics and personal choice because the terms have been used interchangeably in much of psychology. Although values are often seen as the most inclusive construct, Dawis (1980) notes that, depending on the author, values are equated with beliefs (Allport, 1961; Rokeach, 1973), attitudes (Campbell, 1963), needs (Maslow, 1954), interests (Allport, 1961; Perry, 1954), and preferences (Katzell, 1964; Rokeach, 1973).

We believe that needs, values, and interests differ primarily in their breadth and level of abstraction. Super (1973) puts needs at the most abstract level of the hierarchy. He sees values and interests as lower-order constructs that are derived from needs. He defines values as objectives sought in order to satisfy needs and he defines interests as the specific activities and objects through which an individual pursues values and satisfies his or her needs. Interests, then, are the least abstract constructs in Super's hierarchy of motivational terms.

¹ From Hogan, R., & Blake, R. (1996). Vocational interests: Matching self-concept with the work environment. In K.R. Murphy (Ed.), *Behavior in organizations* (pp. 89-144). San Francisco: Jossey-Bass. Adapted with permission.

Dawis (1980) suggests that interests, attitudes, needs, values, and preferences belong to a set of constructs that represent “an affective orientation toward stimulus objects” (p.77). Like Super, he suggests the constructs are arranged in a hierarchy: “Attitudes appear to be the most general construct and refer to a favorable-unfavorable (accept-reject) orientation toward attitude objects. Needs and values refer to the importance-unimportance to the subject of the stimulus object. By contrast, preferences and interests refer to the dimension of liking-disliking for the stimulus object” (p. 77). Although there are some differences between Dawis’ and Super’s hierarchies, they both regard interests as the most specific construct in a hierarchy of motivational terms.

The higher-order constructs must be translated into specific exemplars in order to be assessed. Thus, to measure the need for achievement, one must identify the values, preferences, and interests that characterize that need—e.g., valuing success and accomplishment, preferring recognition over anonymity, and being interested in competitive activities. Assessing constructs at the lowest level of the hierarchy does not require inferences about their relationships to higher-order constructs. For example, interpreting the item “I like tennis” requires no assumptions about the motives or goals that explain a person’s attraction to the sport; that preference could be based on any of a number of underlying motives. Klinger’s (1977) distinction between “needs” and “current concerns” seems relevant. According to Klinger:

. . . a need or motive such as “achievement” or “affiliation” can subsume a wide range of possible concrete goals, any one of which may be the focus of a current concern. Thus, someone with a high “need to achieve” may have separate current concerns about setting a new sales record, beating his or her tennis partner, and patenting a new design for a mousetrap. On the other hand, someone interested in setting a new sales record may be doing it for the money, not because of a need to achieve. (p. 350)

Thus, connecting interests with more abstract motivational constructs may be difficult; being interested in an activity can stem from any number of more abstract motives. More importantly, interests can predict behavior without identifying a higher-order construct to explain the prediction. That is, in fact, how vocational interest measurement developed. Moreover, a considerable empirical literature demonstrates the predictive utility of vocational interest measures. Thus far, however, there seems to have been comparatively little progress in connecting interests to constructs in other domains (Dawis, 1980; Holland, 1976). Holland (1976) notes the separation of interest measurement from the rest of psychology with marked dissatisfaction:

The interest literature still remains largely outside the mainstream of psychology and sociology. The sheer empirical success of these inventories may have relieved interest enthusiasts of the need to cultivate other parts of psychology. Subsequently, neither group—interest types and the other types in psychology—have developed useful dependencies upon one another. Consequently, the interest literature remains a rambling, formless literature integrated only by a few popular inventories and unable to draw on the strengths of personality and learning theory and vice versa. (p. 523)

The foregoing discussion can be summarized in terms of three points. First, the definitions of needs, values, and interests overlap substantially. Second, these terms can be placed in a hierarchy of abstraction with interests as the most concrete and values as the most abstract. And third, although philosophers regard these terms as crucial for explaining social action, psychologists have been largely uninterested in their philosophical implications—specifically, psychologists seem not to understand that: (a) it is tautological to explain behavior in terms of traits, but (b) it is meaningful to explain behavior in terms of values, preferences, and interests (Peters, 1958).

THE MEANING OF INTERESTS

The history of interest measurement primarily concerns efforts to demonstrate its utility. This effort may have been driven by the fact that interest measurement was initially seen as a questionable enterprise. E. K. Strong (1943) observed that “. . . some people in various walks of life, including psychologists, have considered the study of interests as ‘of no scientific value,’ ‘extremely silly and pernicious stuff,’ ‘a sheer waste of time,’ ‘useless and inane’” (p. 8). Perhaps in response to such criticisms, interest measurement research emphasized the ability of such measures to predict meaningful outcomes—work satisfaction, occupational tenure, vocational choice, and so on. Researchers also investigated the stability of vocational interests as well as the covariance structures underlying the items and scales of various interest inventories. As a result, theory—about what interests are—took a back seat to empiricism. Strong defined interests solely in terms of responses to interest test items. According to Strong (1960), interests are:

. . . activities that are liked or disliked. Each person engages in thousands of activities, or habits, if you prefer that term, and attached to each is a liking-disliking affective tone. They remind me of tropisms. We go toward liked activities, go away from disliked activities. (p. 12)

Although many people regard the interest literature as conceptually barren, Strong’s statement contains an implicit assumption about the motivational nature of interests; he regards them as having “directional” properties. In another statement, Strong (1955) acknowledged both the practical concerns that drove the construction of interest inventories (i.e., career guidance and placement) and the conceptual/theoretical connection between interests and other theories of human motivation:

Interest scores measure a complex of liked and disliked activities selected so as to differentiate members of an occupation from non-members. Such a complex is equivalent to a “condition which supplies stimulation for a particular type of behavior,” i.e., toward or away from participation in the activities characteristic of a given occupation. Interest scores are consequently measures of drives. (p. 142)

PERSONALITY AND INTERESTS

We noted above that interests represent the lower level of a hierarchy of motivational constructs--a personality hierarchy of increasing abstractness and decreasing specificity as one moves to successively higher levels. The notion that personality and interests are related or even equivalent has always appealed to vocational psychologists. Hansen (1984) characterizes the notion as "one of the most enduring hypotheses within interest measurement" (p. 116), and virtually all the major players in this field have, at one time or another, suggested that interests reflect more basic personality characteristics. Darley and Hagenah (1955), for example, regarded vocational interest measurement as "a special case in personality theory" and proposed that "interests reflect, in the vocabulary of the world of work, the value systems, the needs, and the motivations of individuals" (p. 191). Layton (1958) considered interests to be "one aspect of what is broadly considered as the motivation of an individual. . . a part of the person's personality structure or organization" (pp. 3-4). Bordin (1943) regarded interest inventory scores as measures of "self concept." Strong (1955) described interest scores as measures of "drives" (p. 142). Super and Crites (1962) suggested that interests have a biological basis—interests are "the product of interaction between inherited neural and endocrine factors, on the one hand, and opportunity and social evaluation on the other" (p. 410). Roe (1957; Roe & Siegelman, 1964) suggested that parental relations during early childhood produces an orientation toward either "persons" or "nonpersons" that, in turn, affects the development of an individual's pattern of interests.

Holland (1973) made the strongest statement regarding the relationships between interests and personality:

If vocational interests are construed as an expression of personality, then they represent the expression of personality in work, school subjects, hobbies, recreational activities, and preferences. In short, what we have called "vocational interests" are simply another aspect of personality. . . If vocational interests are an expression of personality, then it follows that interest inventories are personality inventories. (p. 7)

Nonetheless, the content of the two types of inventories—interests versus personality—suggest that they sample something different. Hofstee (1990) notes that the prototypical personality questionnaire item is a "conditional" trait, "an expressed predisposition to behave in a certain way in a particular situation" (p. 79). He also notes that personality inventory items typically consist of "a hodgepodge of descriptions of overt and covert reactions, trait attributions, wishes and interests, biographical facts, attitudes and beliefs, descriptions of others' reactions to the subject, and more or less bizarre opinions (e.g., 'Somebody is trying to poison me')" (p. 79). In contrast, Rounds (1995) describes the content of interest items and scales as follows:

Broadly speaking, interest items and scales involve preferences for behaviors (response and activity families), situations (the context in which the preferred behaviors occur, usually

occupations or physical settings), and reinforcer systems (outcomes or reinforcers associated with the behavior in the situation). On the response side, vocational interests are usually characterized by a shared property of the activities (Selling, Technical Writing, Teaching), and are often implied in the objects of interest (Mathematics, Physical Science, Religion) or inferred as a latent entity (Enterprising, Inquiring, Leading- Influencing); on the stimulus side a shared property of the context (Outdoor Work, Office Work, Industrial) is invoked to explain interest covariation. . . . (pp. 184-188)

The conventional wisdom is that personality inventories measure traits whereas interest inventories measure preferences. Our view is closer to Bordin's (1943)—we think both kinds of inventories measure self-concepts. Hogan (1983; 1995) points out that when people respond to items on psychological inventories, they behave much as they do during other forms of social interaction. People use their responses to tell others about their idealized self-concept—about how they would like to be regarded by other people. Here, however, we come to a crucial difference between personality and interest inventories. Personality measures ask about a person's typical response in various situations, but interest measures ask about a person's preferred activities, roles, and associates. Interest measures allow people to describe themselves as they would like to be. Thus, interest inventories get much closer to the content of a person's self-concept than do personality measures.

Interest inventories also allow people to describe themselves in a manner more consistent with their behavior when interacting with strangers. Consider a conversation between people who have just met in an informal social situation. In response to the inquiry "Tell me about yourself," a person is more likely to say "I like tennis" than "In most situations, I am highly competitive." People are accustomed to talking about themselves in terms of interests; interests are at the core of the language of social self-description.

STRUCTURE OF INTERESTS

According to Rounds (1995), factor analyses of the interest domain suggests it has a roughly hierarchical structure with approximately three levels of generality. At the lowest level are occupational interest factors; each factor is a set of activities that characterize a particular work setting or occupation; "Elementary Education" and "Library Science" are examples of occupational interest factors. At a more general level are what Rounds calls basic interest dimensions. According to Rounds, these "comprise work activities that transcend particular situations (occupations)" (p. 188). These dimensions seem to emerge most reliably from item-level factor analyses of vocational interest inventories, and include factors like "mechanical activities," "mathematics," or "outdoor activities." The activities that form these factors seem intuitively similar, and Rounds notes that "most people describe their vocational interests using the language of basic interests" (p. 188).

Finally, at the highest level are “general interest factors.” These typically emerge from higher-order analyses of basic interest dimensions. At this level, “the elements of the activity family (or occupational family) are dissimilar and an internal entity is postulated to explain their covariation” (Rounds, 1995, p. 188).

Rounds (1995) suggests that, for the interest domain, the distinction between basic interest dimensions and the general interest themes corresponds to Meehl’s (1986) distinction between “surface” and “source” traits. Scales designed to measure the higher-order, general interest themes have only recently become part of interest inventories. This process is reflected in the successive revisions of the Strong Interest Inventory (SII). It began as a series of empirically-keyed occupational scales, but the current form of the SII contains scales corresponding to all three of the levels proposed by Rounds.

Although Strong (1943), Roe (1956), Holland (1973), and Jackson (1977) have proposed general interest schemes, Holland’s system is the most widely accepted and popular in the U.S. Building on Roe’s work and on factor-analyses reported by Guilford, Christensen, Bond, and Sutton (1954), Holland (1973, 1985a) proposed a taxonomy for organizing individuals and occupations using six occupational “personality types”. Realistic (R) types are practical, hands on, real world and action oriented; Investigative (I) types are abstract, analytical, and theory oriented; Artistic (A) types are imaginative, impractical, and try to entertain, amuse, and fascinate others; Social (S) types enjoy helping, serving, and assisting others; Enterprising (E) types try to manipulate, persuade, and outperform others; and Conventional (C) types count, regulate, and organize people or things. The types are portrayed in a hexagonal configuration; adjacent types are more similar to one another than are types located at opposite sides of the hexagon. Although multidimensional analyses of scales designed to measure Holland’s types rarely, if ever, reproduce a perfectly shaped hexagon, they generally replicate a circumplicial ordering of the types (i.e., RIASEC), suggesting that the internal relations among the types match Holland’s model (Rounds, Davison, & Dawis, 1979; Rounds & Zevon, 1983). Alternative structural models summarizing the relations among the types have been proposed (e.g., Gati, 1991), but the evidence consistently supports Holland’s hexagonal model as the most adequate representation of the structure of interests (Tracey & Rounds, 1992).

In the domain of interest measurement, Holland’s model has attained about the same status as the Five-Factor Model or Big-Five in personality assessment. Holland’s model has also had a major impact on the construction of interest inventories; in addition to Holland’s own tests—the Vocational Preference Inventory (VPI; Holland, 1965) and Self-Directed Search (SDS; Holland, 1985b)—most other inventories report their results in Holland’s terms. In the early 1970’s, Holland’s scales were incorporated into the Strong-Campbell Interest Inventory (now Strong Interest Inventory; SII; Campbell & Holland, 1972; Hansen and Johannson, 1972). Subsequently, authors of other inventories, notably the Unisex Edition of the ACT Interest Inventory (UNIACT; American College Testing

Program), the Career Assessment Inventory, Vocational Edition (CAI-V; Johannson, 1986), and the Career Decision-Making Inventory (CDM; Harrington & O'Shea, 1982) have developed measures of Holland's themes. Even Kuder, who has his own organizational scheme, provides formulas to translate his scores into Holland's themes (Zytowski & Kuder, 1986). Although Roe developed a model that is in many ways similar to Holland's scheme, it has not achieved the same degree of popularity.

INTERESTS AND OCCUPATIONAL CRITERIA

Strong (1943) noted that he could think of "no better criterion for a vocational interest test than that of satisfaction enduring over a period of time" (p. 385). Occupational membership—which implies satisfaction—has been the most popular dependent variable in the study of interests. Research consistently finds that members of different occupations respond differently to interest items, and many occupational groups can be distinguished on the basis of their interests. Furthermore, occupational membership can be reliably predicted from interests measured at an earlier age. Strong (1935; 1943) reports long term follow-up studies with the SVIB yielding impressive "hit rates" (as high as 78%) in predicting occupational membership using interest scale scores obtained five to eighteen years earlier. Strong's findings have been replicated by many investigators using a variety of samples and methods (e.g., Bartling & Hood, 1981; Brandt & Hood, 1968; Cairo, 1982; Campbell, 1966; Dolliver, Irvin, & Bigley, 1972; Dolliver & Will, 1977; Gade & Soliah, 1975; Hansen, 1986; Hansen & Swanson, 1983; Lau & Abrahams, 1971; Worthington & Dolliver, 1977; Zytowski, 1976). There is solid evidence that measured interests predict occupational membership criteria.

Although these results are impressive, they nonetheless raise questions about the factors that explain a person's tenure in a particular occupation. Dawis and Lofquist (1984) propose that two relatively distinct appraisal processes affect tenure in an occupation. One is the degree to which a person is satisfied with the environment—the nature of the work, the working conditions, the compensation, the quality of relationships with coworkers and supervisors. The other is the degree to which the environment (i.e., the employer) is satisfied with the employee. The implications of these appraisals for tenure are relatively straightforward. A dissatisfied employee will be more likely to leave an occupation or organization; an unsatisfactory employee will be more likely to be expelled. A more fine-grained analysis of the relationship between interests and occupational success requires that the validity of measured interests for each of these criteria be considered separately.

Satisfaction

As noted above, Strong (1943) believed that the most appropriate criterion for assessing the validity of interest measures is satisfaction. Research on this topic, however, has produced mixed results. A number of researchers have failed to find a significant relationship between interests and job

satisfaction (e.g., Bartling & Hood, 1981; Butler, Crinnion, & Martin, 1972; Cairo, 1982; Dolliver, Irvin, & Bigley, 1972; McArthur, 1954; Schletzer, 1966; Trimble, 1965; Zytowski, 1976). Others, however, have found the expected relationships (e.g., Barak & Meir, 1974; DiMichael & Dabelstein, 1947; Hahn & Williams, 1945; Herzberg & Russell, 1953; Klein & Weiner, 1977; McRae, 1959; North, 1958; Trimble, 1965; Worthington & Dolliver, 1977). In the positive studies, the correlations have generally been low to moderate. Barge and Hough (1988) cite 18 studies with a median correlation of .31 between interests and job satisfaction.

Campbell (1971) suggests that the modest relationships between interests and job satisfaction reported in the literature reflect a restriction in the range of the criterion variable; i.e., most incumbents express satisfaction with their work. Weaver (1980), for example, reports that more than 80% of American workers said they were either somewhat or very satisfied with their jobs. It is also becoming clear that a variety of factors influence workers' judgments about whether a job is "satisfying". It is not clear that having "interesting work" is a major concern for all employees. Moreover, many features of the work environment—i.e., pay, security, supervision—that have little to do with the content of the work also influence satisfaction. Furthermore, there are marked individual differences in the degree to which any of these factors influence workers' feelings of satisfaction with a job (Dawis & Lofquist, 1984). Finally, there are individual differences in the degree to which workers express satisfaction with any job; individual differences in the disposition to experience positive or negative affective states strongly influence self-reported job satisfaction (e.g., Burke, Brief, & George, 1993; Costa & McCrae, 1980; Levin & Stokes, 1989).

Satisfactoriness

There is little systematic research on the link between interests and the degree to which an employee is regarded by others as satisfactory. Nonetheless, existing studies yield reasonable validity coefficients. Most studies use performance ratings as criteria and involve a variety of occupational groups including: Navy enlisted personnel (Borman, Toquam, & Rosse, 1979; Dann & Abrahams, 1977; Lau & Abrahams, 1970); Naval Academy cadets (Abrahams & Neumann, 1973); forest rangers (Miner, 1960); supervisors (Strong, 1943); foremen and assistant foremen (Schultz & Barnabas, 1945); managers (Johnson & Dunnette, 1968; Nash, 1966); engineers (Dunnette & Aylward, 1956); counselors (Wiggins & Weslander, 1979). Barge and Hough (1988) review the results of 11 studies using performance ratings as the dependent variable and report correlations ranging from .01 to .40 (median $r = .20$). There is variability even within a single study; Lau and Abrahams (1970), in a study of Navy enlisted recruits report, for example, correlations between interest scores and performance ratings ranging from .15 to .38 (median $r = .25$). Although there are occasional negative findings (e.g., Dunnette & Aylward, 1956), the validity coefficients compare favorably with those obtained with personality inventories and are occasionally quite large. Wiggins and Weslander (1979) report correlations of -.60 and .56 between the Realistic and Social scales of Holland's VPI and the rated performance of counselors.

Productivity

A handful of studies have found positive relations between interests and objective indices of worker productivity. Three of the studies cited by Barge and Hough (1988) used archival production records as dependent variables, and found a median correlation between interests and performance of .33 (range from .24 to .53). Strong (1943) reported a correlation of .40 between interest scores and the productivity of insurance agents. Knauff (1951) reported a cross-validated correlation of .53 between a specially developed key and an objective criterion of performance (cost/sales ratio) for bakery shop managers. Clark (1961) concluded that work performance is an interaction between ability and interests; Clark's data indicated that interest scores predict job performance better at some ability levels than at others.

Organizational Climate

Holland (1973; 1985a) and Schneider (1987) suggest that, in order to understand organizational behavior, we need to understand the values, interests, and personalities of an organization's members. Holland argues that "the character of an environment reflects the typical characteristics of its members. If we know what kind of people make up a group, we can infer the climate the group creates" (1985, p. 35). Similarly, Schneider (1987) argues that organizations attract, select, and retain particular kinds of people, and that the climate of an organization is a function of the kind of people it retains. Pfeffer's (1983) "organizational demography model" is similar, but focuses on the shared biographical characteristics of incumbents. In each of these schemes, interpersonal compatibility determines an individual's "fit" with an organization. Consistent with the social psychological literature, interpersonal compatibility is associated with perceived similarity, and this, in turn, produces a relative homogeneity of values and interests within organizations. Both Holland and Schneider define the climate of an organization in terms of the members' characteristics rather than their requisite tasks. They also suggest that taxonomies of work environments based on worker characteristics may predict work outcomes better than taxonomies based on task characteristics; person analysis may be more important than task analysis.

There is substantial empirical support for these ideas in the vocational interest literature. The notion that interpersonal similarity is psychologically important and that, "birds of a feather flock together" is a cornerstone of vocational psychology (Darley & Hagenah, 1955, p. 19). Holland's (1973) taxonomy defines occupational environments in terms of members' interests and values. The model also predicts how compatible individuals will be with others in a particular occupational or organizational setting—and this in turn predicts how others in the work environment will react to that individual. To the extent that individual success depends on others' reactions to—and subjective evaluations of—an incumbent, interest inventories are likely to be effective as job placement tools.

In summary, it is useful to know what kinds of people make up an occupation (or organization). It is also useful to be able to predict how compatible an individual will be with others in an occupation (or organization). The field of vocational interest measurement reflects a perspective on the individual that is quite different from that in industrial-organizational psychology. Vocational psychologists help people find compatible work environments. That involves helping a person choose from among an array of employment options—and matching individual differences to characteristics of occupations. Vocational counseling required the development of a taxonomy of work environments. Holland's taxonomy is one example of a psychologically meaningful taxonomy of work environments (cf., Borgen, Weiss, Tinsley, Dawis, & Lofquist, 1968; Dawis, Dohm, Lofquist, Chartrand, & Due, 1987; Rosen, Weiss, Hendel, Dawis, & Lofquist, 1972). Industrial/organizational psychology has yet to avail itself of much of this work. Nevertheless, the advantages of these taxonomic schemes for researchers undertaking meta-analyses in order to uncover important relationships between individual differences and important work outcomes should be obvious.

SUMMARY

This chapter makes three major points. First, motivational constructs can be organized in a roughly hierarchical structure; abstract intentional concepts (values) occupy the highest level of the hierarchy and the concrete manifestation of those intentions (interests) occupy the lowest level. Second, the pattern of an individual's preferences as seen in his or her responses to an inventory of values and interests has important real world consequences; interests are demonstrably associated with vocational success and satisfaction. Although we have discussed these notions only in general terms, more specific information about motivational constructs is presented in the next chapters. And third, values and interests are motivational concepts. If we know what a person values and what he or she finds interesting, then we know a great deal about him or her—we have a powerful tool for understanding, advising, and/or managing that person.

CHAPTER 2

Inventory Construction

WHAT TO MEASURE

The Motives, Values, Preferences Inventory (MVPI) is designed to serve two very important goals. First, the MVPI permits an evaluation of the fit between an individual and the organizational culture. This is quite important because, no matter how talented and hard working a person may be, if his or her values are incompatible with the values of the larger culture—and the culture is usually defined by the values of top management—then he or she will not do well in the organization.

Second, the MVPI is unique among the inventories that are currently available in that it allows assessment of a person's motives directly. The standard interest measures allow inference about a person's motives on the basis of his or her expressed occupational choices. But from the MVPI, one can determine immediately the degree to which, for example, a person is motivated by money, security, or fun. The only alternative to the MVPI for directly assessing a person's motives is to use a projective measure.

The scales of the MVPI represent dimensions that have historic presence in the literature on motivation. We reviewed 80 years of theory and research on motives, values, and interests and developed 10 content scales. We were specifically influenced by the taxonomies of Spranger (1928), Allport (1961), Murray (1938), Allport, Vernon, and Lindzey (1960), and Holland (1966, 1985a). Although the labels that these authors use to orient their taxonomies are different, and some of their dimensions are trait-like while others refer to types, there is, nonetheless, considerable overlap in the attitudes, values, needs, interests, goals, and commitments that they regard as important. Gregory (1992) summarizes these motivational constructs (see Table 2.1) and indicates how their content aligns with the 10 scales of the MVPI.

Because the history of each of these constructs is useful for understanding measurement goals for each MVPI scale, we highlight some of the views that have influenced what we believe to be an adequate taxonomy of motives.

TABLE 2.1

Logical Taxonomy of Motives, Attitudes, Values, Needs, Interests, Goals, and Commitments

MVPI	Attitudes: Spranger	Values: Allport, Vernon, Lindzey	Needs: Murray	Interests: Holland	Goals: Richards	Goals: Wicker, Lambert, Richardson, & Kahler	Goals: Pervin	Commitments: Novacek & Lazarus
Aesthetic	Aesthetic	Aesthetic	Sentience	Artistic	Artistic			Sensation-Seeking
Affiliation	Social	Social	Affiliation	Social			Relaxation-Fun-Friendship	Affiliation
Altruistic	Social	Social	Nurturance	Social	Altruistic	Interpersonal Concern	Affection-Support	Altruism
Commercial	Economic	Economic	Acquisition	Conventional				Power/Achievement
Hedonistic	Aesthetic		Sex, Play		Hedonistic		Relaxation-Fun-Friendship	Sensation-Seeking
Power	Political	Political	Achievement Dominance	Enterprising	Prestige	Competitive Ambition	Aggression-Power	Power/Achievement
Recognition	Political	Political	Exhibition		Prestige	Competitive Ambition	Aggression-Power	Power/Achievement
Scientific	Theoretical	Theoretical	Understanding	Investigative	Scientific			
Security			Succorance Infavoidance	Conventional			Reduce Tension-Conflict-Threat	Stress Avoidance
Tradition	Religious	Religious			Religious			Personal Growth

(Source: Gregory, 1992. Reprinted with permission.)

Aesthetic Motives

Spranger's (1928) conception of the aesthete was a person who enjoys the pleasures of the body and the arts. Murray's (1938) need for sentience, which he described as seeking out sensuous feelings and impressions, is similar to Spranger's aesthetic attitude. Holland's (1987, p. 5) artistic type values the world of beauty, identifies with artists of various disciplines, and aspires to work in artistic pursuits. Holland describes artistic types as creative, sensitive, imaginative, and nonconforming.

Affiliation Motives

Spranger's social attitude highlights desires for interaction and positive interpersonal relations. Murray's need for affiliation is one of the best known motives in his taxonomy; it emphasizes a desire for friendship. Holland's social type wants to be helpful, identifies with do-gooders/bleeding hearts, and seeks out opportunities for social interaction.

Altruistic Motives

Altruistic motives resemble affiliation motives; Spranger's social attitude and Holland's social type capture part of this construct. However, the distinction between affiliation and altruism is nicely characterized in Murray's need for nurturance. Nurturance focuses on helping, protecting, caring for, and curing those in need while affiliation concerns desires for friendship and being around others. Novacek and Lazarus (1990) identified a dimension called altruism which they describe as the desire to help and support others as well as being willing to make sacrifices for them.

Commercial Motives

Interest in business and money making are the keys to commercial motives and this dimension can be traced back to Spranger's economic attitude, which emphasized the desire to control resources and to acquire material possessions. Vernon and Allport's economic man is interested in business and the accumulation of wealth. Holland's conventional type is interested in business, identifies with successful business people, and wants to work in finance and commerce. These types are described as conservative, conforming, unimaginative, and methodical.

Hedonistic Motives

None of Spranger's attitudes are closely aligned with hedonistic motives. Murray's needs for sex and play contain elements that are similar to hedonism; erotic pleasure is the basis of the need for sex and having fun is the basis of the need for play. Holland has no type analogous to the hedonistic motive. Novacek and Lazarus identify a sensation seeking dimension that emphasizes sexual pleasure, fun, free time, and excitement.

Power Motives

Spranger's political attitude highlights achievement, aggression, status, and dominance. Vernon and Allport describe the political man as one who primarily focuses on achieving power. Murray's needs for achievement and dominance fit closely with the power motive. The power motive is clearly aligned with Holland's enterprising type. This type seeks leadership positions, values freedom and ambition, and has as a life goal being in charge. Holland describes enterprising types as power-seeking, dominant, enthusiastic, and energetic.

Recognition Motives

The need to be recognized and to gain the attention of others is distinct from the power motive. Although Spranger, Vernon and Allport, and Novacek and Lazarus combine power with recognition, Murray distinguishes between power and recognition by proposing achievement and dominance needs (power) and exhibition needs (recognition). Gregory (1992) proposes that recognition may apply to all of Holland's types, since the theme tends to resemble a trait more than a type.

Scientific Motives

Spranger's theoretical attitude emphasizes a preference for naming, classifying, and logical analysis. Similarly, Vernon and Allport proposed that the theoretical man seeks to discover truth through empirical, critical, and logical means. Holland's investigative type values logic, analysis, and the pursuit of knowledge. This type enjoys science and identifies with scientists. Holland describes the investigative type as intellectual, scholarly, analytical, and curious.

Security Motives

As seen in Table 2.1, the security motives are not well-mapped by constructs identified by the major motivational theorists. Gregory (1992) points out that these motives are also more like traits than types. Because the construct concerns needs for certainty, control and order, it resembles Murray's definition of the needs for succorance and infavoidance. The succorance need entails the desire to be protected and cared for, whereas the infavoidance need implies a cautious, controlled attitude. There is some overlap between the security motives and Holland's description of conventional types as conforming, conservative, and methodical.

Tradition Motives

The tradition motives resemble Spranger's religious attitudes which are concerned with moral issues and conservative values. Novacek and Lazarus identified a personal growth dimension that contains the moral, ethical, and spiritual themes associated with the tradition motives, particularly in the aspiration to be fair and just, and the need to develop a philosophy of life. None of Holland's types endorse the tradition motives, with the possible exception of social types, who are idealistic, want to help others, value equality, and identify with spiritual leaders.

DEFINITIONS OF THE SCALES

The 10 MVPI scales are defined as follows:

Aesthetic motives are associated with an interest in art, literature, music, the humanities and a lifestyle guided by questions of culture, good taste, and attractive surroundings.

Affiliation motives are associated with a desire for and enjoyment of social interaction.

Altruistic motives involve concern about the welfare of others, especially the less fortunate, a desire to help them, and in some way, contribute to the development of a better society.

Commercial motives reflect an interest in business and business-related matters such as accounting, marketing, management, and finances.

Hedonistic motives produce an orientation toward fun, pleasure, and enjoyment.

Power motives are associated with a desire for success, accomplishment, status, competition, and control.

Recognition motives reflect responsiveness to attention, approval, praise, a need to be recognized, and an appreciation for the role of recognition in human motivation.

Scientific motives are associated with a desire for knowledge, an enthusiasm for new and advanced technologies, and a curiosity about how things work.

Security motives reflect a desire for certainty, predictability, order, and control in one's life.

Tradition motives are typically expressed in terms of a dedication to ritual, history, spirituality, and old-fashioned virtues.

COMPOSITION OF THE MVPI

The MVPI contains 200 items in the form of statements to which a respondent indicates “agree”, “uncertain”, or “disagree”. Each scale contains 20 items that were derived rationally from hypotheses about the likes, dislikes, and aversions of the “ideal” exemplar of each motive. Each scale is composed of five themes: (a) Lifestyles, which concern the manner in which a person would like to live; (b) Beliefs, which involve “shoulds”, ideals, and ultimate life goals; (c) Occupational Preferences, which include the work an individual would like to do, what constitutes a good job, and preferred work materials; (d) Aversions, which reflect attitudes and behaviors that are either disliked or distressing; and (e) Preferred Associates, which include the kind of persons desired as coworkers and friends.

There are no correct or incorrect responses for the MVPI scales; therefore, there is no need for validity or faking keys. There is no item overlap among the 10 scales. The items were screened for content that might seem offensive or to invade privacy. There are no items concerning sexual preferences, religious beliefs, criminal or illegal behavior, racial/ethnic attitudes, or attitudes about disabled individuals. There are no items that could be used to determine physical or mental disabilities; the MVPI is not a medical examination.

Readability statistics conducted on the 200 items indicated an average sentence length of 9.7 words and an average word length of 4.7 characters. The Flesch-Kincaid reading level analysis shows that the inventory is written at the third grade level.

Table 2.2 presents descriptive statistics and reliabilities for each of the MVPI scales. Because the response coding uses a 3-point scale (1 = disagree, 2 = uncertain, 3 = agree), and each scale contains 20 items, scale scores range from 20 to 60. With the exception of the test-retest reliabilities, the data in Table 2.2 are based on an archival sample of 3,015 adults, most of whom are job applicants or employees. Table 2.2 indicates that the highest mean scale scores occur on the Altruistic, Affiliation, and Power scales, respectively. The lowest mean scores occur on the Aesthetic, Hedonistic, and Scientific scales. The Aesthetic scale is the most variable ($SD = 8.02$), whereas the Affiliation scale is the least variable ($SD = 5.56$). Internal consistency or alpha reliabilities (Cronbach, 1951) vary between .70 (Security) and .84 (Aesthetic) with an average alpha of .77. Test-retest reliabilities were computed for a sample of advanced undergraduate students ($N=50$) over a three month interval; the highest scale reliability was for Tradition (.88) and the lowest was for Hedonistic (.64), with an average reliability of .77. Similar results were obtained by Gregory (1992) who evaluated test-retest scale stability over an eight week interval. From student respondents ($N = 50$), the correlations ranged from .69 for Power to .88 for Recognition. The standard error of measurement was consistent across all scales and averaged .125.

TABLE 2.2

Descriptive Statistics and Reliabilities for the MVPI							
Scale	Number of items	Mean	SD	Alpha	Inter-Itemr	rtt	SE
Aesthetic	20	34.5	8.02	.84	.22	.83	.15
Affiliation	20	49.1	5.56	.71	.14	.77	.10
Altruistic	20	50.7	6.53	.81	.19	.71	.12
Commercial	20	44.6	6.41	.71	.11	.84	.12
Hedonistic	20	38.0	6.83	.78	.14	.64	.13
Power	20	47.6	6.00	.71	.11	.71	.11
Recognition	20	43.2	7.11	.77	.14	.84	.13
Scientific	20	40.2	7.61	.80	.16	.86	.14
Security	20	43.1	6.46	.70	.11	.77	.12
Tradition	20	46.5	7.12	.80	.16	.88	.13

Table 2.3 contains scale means and standard deviations by gender, race/ethnicity, and age. As seen, men and women obtain comparable scores across all scales; the largest mean difference is slightly more than 2 points on the Scientific scale in favor of men, and less than 3 points on the Aesthetic scale in favor of women. The largest race differences occur on the Security and Recognition scales with Blacks scoring slightly higher than Whites. Comparing younger and older individuals, those under 40 years have slightly higher mean scores for Hedonistic and Recognition motives, while those 40 years and older have higher average scores for Security and Tradition motives. Because the sample sizes are so large, significance tests of group differences are meaningless and, therefore, are not presented.

TABLE 2.3

Raw Score Means and Standard Deviations for MVPI Scales by Demographic Group												
Scale	Male		Female		Black		White		Under 40		40 & above	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Aesthetic	33.7	7.85	36.5	8.10	34.4	7.82	33.8	7.88	34.5	8.20	33.8	7.38
Affiliation	49.2	5.47	48.7	5.80	48.0	5.12	49.9	5.12	49.1	5.59	49.4	5.32
Altruistic	50.8	6.57	50.6	6.41	52.2	6.10	50.6	6.28	51.2	6.38	49.5	6.31
Commercial	45.1	6.41	43.1	6.13	46.2	6.64	44.5	6.40	44.4	6.52	45.4	5.88
Hedonistic	37.8	6.92	38.7	6.59	37.5	6.09	37.1	6.39	38.7	6.91	35.3	5.88
Power	48.1	5.72	46.2	6.44	47.6	5.50	47.6	6.02	47.8	5.85	47.7	6.38
Recognition	43.6	7.05	41.9	7.12	44.5	6.85	42.5	7.02	43.8	6.96	41.5	7.33
Scientific	40.8	7.44	38.4	7.71	38.9	6.80	39.8	7.59	40.6	7.63	39.8	7.34
Security	43.3	6.41	42.6	6.55	46.1	5.89	42.4	6.52	43.5	6.29	52.0	6.65
Tradition	46.5	7.28	46.3	6.72	48.3	6.66	47.1	6.90	46.2	7.16	48.1	6.93

Table 2.4 presents the correlations between the MVPI scales based on a sample of 3,015 respondents. As seen, Commercial is positively correlated with every other MVPI scale, which may reflect a status dimension running through the scales. Similarly, Power and Recognition correlate to some degree with every scale except Security and Tradition. All scales have about three meaningful correlations with other scales. The only inverse relation in the matrix is the correlation of $-.30$ between Hedonistic and Tradition, which is appropriate and meaningful.

TABLE 2.4

MVPI Scale Intercorrelations										
	AES	AFF	ALT	CML	HDN	PWR	REC	SCI	SEC	TRA
Aesthetic	—									
Affiliation	-.03	—								
Altruistic	.12	.39	—							
Commercial	.10	.19	.10	—						
Hedonistic	.25	.09	-.03	.14	—					
Power	.12	.32	.20	.48	.25	—				
Recognition	.22	.27	.13	.33	.43	.50	—			
Scientific	.33	-.02	.11	.25	.11	.28	.21	—		
Security	-.10	-.02	.30	.25	-.04	.06	.02	.06	—	
Tradition	.02	.13	.37	.16	-.30	.09	-.06	.04	.28	—

Table 2.5 presents a principal components analysis of the correlation matrix presented in Table 2.4. As seen, four components account for 67% of the variance in the matrix. The first component is defined by Recognition, Power, and Hedonistic and resembles Spranger's political attitude, Murray's achievement and dominance needs, and Holland's enterprising type. The second component is defined by Altruistic, Affiliation, and Tradition motives and corresponds to Spranger's social attitude, Murray's affiliation and nurturance needs, and Holland's social type. The third component is defined by Security and Commercial motives and corresponds to Spranger's economic attitude, Murray's acquisition and succorance needs, and Holland's conventional type. The final component, defined by Aesthetic and Scientific motives, corresponds to Spranger's aesthetic and theoretical attitudes, Murray's sentience and understanding needs, and Holland's artistic and investigative types. Because the MVPI is designed to cover historically significant and practically important motive themes, we made no attempt to develop scales that are statistically independent. The results in Tables 2.4 and 2.5 show the relations between the MVPI scales: they are sensible and interpretable.

TABLE 2.5

Principal Components Analysis for MVPI Scales				
Scale	I	II	III	IV
Recognition	.78			
Power	.72			
Hedonistic	.66			
Altruistic		.82		
Affiliation	.45	.68		
Tradition		.62	.43	
Security			.77	
Commercial	.54		.61	
Aesthetic				.83
Scientific				.73

Note: Percent of Variance = 66.5

CHAPTER 3

Validity

CONSTRUCT VALIDITY

The usefulness of a psychometric instrument depends on the appropriateness of decisions made from test score information. The critical problem for test users is to understand the meaning of test scores, which can be a complex process. We believe the best way to discover the meaning of a test score is to develop a theory regarding the latent structure underlying both test scores and criteria. The process of correlating scale scores with all other available measures is inefficient. Instead, using the theory of what the scale is supposed to measure, we can predict its relations (and lack of relations), and then use data to evaluate our hypotheses.

For the MVPI, the most important sources of validity information are item content and correlations between scale scores and other well-validated tests and observers' ratings. Investigating these relations in the context of ideas about what the scales are intended to measure is analogous to hypothesis testing. This process is construct validation and it relies on multiple sources of evidence to infer meaning from scale scores.

ITEM CONTENT

Like other interest measures, the MVPI items are content valid. The test items represent the motives, values, and interests that are being measured. Responses to the items provide a direct index of a person's feelings about the subject. For example, the answer to the item "In my spare time I would like to go to art museums or listen to classical music" directly reflects the respondent's aesthetic values and interests. Each MVPI scale was constructed to reflect five themes, and items were written to represent the expression of the motive construct through the theme. Consider the Aesthetic scale; the following items express the five themes: (a) Lifestyles— "I like to spend my free time reading novels and listening to classical music", (b) Beliefs— "A dedication to art is the highest calling in life", (c) Occupational Preferences— "I would like to be an artist or a musician", (d) Aversions— "I dislike being with people who have no interest in the arts"; and (e) Preferred Associates— "I like to be around artists and writers."

These are examples of content valid items from the Aesthetic scale. Items on the remaining nine scales were constructed using the same content process. For each scale, the item was examined

and compared with the intended content theme. Using this method of item construction, content validation is straightforward.

CORRELATIONS WITH OTHER TESTS

Tables 3.1 through 3.7 present correlations between the MVPI scales and other well known psychological measures. These tables include four types of tests: measures of interests, normal personality, dysfunctional personality, and cognitive ability.

The Self-Directed Search (SDS; Holland, 1985b) is an interest inventory that assesses the six occupational types based on Holland's (1985a) theory of careers. The SDS is the most widely used interest inventory in the world. It is scored for six occupational types: (a) Realistic (R); (b) Investigative (I); (c) Artistic (A); (d) Social (S); (e) Enterprising (E); and (f) Conventional (C). A sample (N = 167) of male and female high school seniors provided the data for the SDS and the MVPI.

The measures of normal personality in the tables are the Myers-Briggs Type Indicator (MBTI; Myers & McCaulley, 1985) and the Hogan Personality Inventory (HPI; R. Hogan & J. Hogan, 1995). The MBTI is the most widely used personality inventory in modern America; it is designed to assess 16 types defined by Jungian theory (Jung, 1923). The types are composed of combinations of four basic mental functions: (a) sensing (S); (b) intuition (N); (c) thinking (T); and (d) feeling (F); two attitudes or orientations toward life: extraversion (E) and introversion (I); and two orientations to the outer world: judging (J) and perceiving (P). For research, preferences are expressed in continuous scores with lower scores indicating preferences for E, S, T, and J and higher scores indicating preferences for I, N, F, and P. A sample (N= 46) of male and female graduate students completed the MBTI and the MVPI.

The HPI is a 206-item inventory of normal personality based on the Big-Five personality dimensions. The HPI is used primarily in occupational settings for personnel selection, placement, coaching, and individualized assessment. The HPI contains seven primary scales and a validity scale. The primary scales and their Big-Five counterparts are: (a) Adjustment (Emotional Stability); (b) Ambition (Extraversion); (c) Sociability (Extraversion); (d) Likeability (Agreeableness); (e) Prudence (Conscientiousness); (f) Intellectance (Intellect/Openness); and (g) School Success (Intellect/Openness). A sample (N = 2,508) of male and female employed adults provided data for the HPI and the MVPI.

The measures of dysfunctional personality included the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943) and the Hogan Development Survey (HDS; R. Hogan & J. Hogan, 1996). The MMPI was designed to assess serious psychopathology and it (and the recent revision) is the most widely used test of psychopathology in the world. The MMPI includes three validity keys—Lie (L), Fake Bad (F), and correction (K)—and 10 clinical scales: (a) Hypochondriasis

(Hs); (b) Depression (D); (c) Hysteria (Hy); (d) Psychopathic Deviate (Pd); (e) Masculinity-Femininity (Mf); (f) Paranoia (Pa); (g) Psychasthenia (Pt); (h) Schizophrenia (Sc); (i) Hypomania (Ma); and (l) Social Introversion (Si). The sample (N = 134) who completed the MMPI and the MVPI were male and female police officer job applicants.

The HDS is a 168-item inventory to identify dysfunctional dispositions that may prevent a person from achieving full career potential. The scales were developed from and validated against employment derailment factors. Although some of the personality constructs are similar to the DSM IV, Axis 2 personality disorders, there is no psychiatric stigma associated with scale scores; no inferences about mental disabilities can be made from the test results. The HDS contains one scale to detect socially desirable responding and 11 content scales: (a) Reserved (RES); (b) Skeptical (SKE); (c) Excitable (EXC); (d) Imaginative (IMA); (e) Colorful (COL); (f) Bold (BOL); (g) Cautious (CAU); (h) Dutiful (DUT); (i) Leisurely (LEI); (j) Diligent (DIL); and (k) Mischievous (MIS). A sample (N = 140) of male and female sales and marketing employees completed the HDS and the MVPI.

The measures of cognitive ability in the tables are the Watson-Glaser Critical Thinking Appraisal (Watson & Glaser, 1980) and the Industrial Reading Test (The Psychological Corporation, 1989). The Watson-Glaser is a widely used measure of critical thinking, composed of 80 items across five content areas. These include inference, recognition of assumptions, deduction, interpretation, and evaluation of arguments. For each area, stimulus passages are presented and several conclusions follow. The test taker examines each conclusion and makes decisions about its truth or falsity. Correct responses are summed for a total test score. The Industrial Reading Test is a power test of reading comprehension. It consists of nine reading passages and 38 items. Although the passages focus on work-relevant topics, performance does not depend on knowledge of industrial subject matter. Reading difficulty is reported to be high school level. A sample (N = 117) of male and female railroad applicants for service lane coordinator, yardmaster, dispatcher, and locomotive engineer jobs completed the Watson-Glaser and the MVPI; a sample (N= 83) male and female railroad applicants for service lane coordinator and dispatcher jobs completed the Industrial Reading Testing and the MVPI.

We discuss the MVPI correlational data for each inventory separately. The presentation is organized in terms of scale convergence and independence. The pattern of test-test correlates is one way to evaluate construct validity and to summarize inferences that can be made from the MVPI scale scores.

MVPI and the Self-Directed Search

We hypothesized that the largest correlations between the six SDS scales and the MVPI would be for SDS Investigative, Artistic, and Conventional scales. Because the SDS Social and Enterprising scales entail broader themes, we predicted their pattern of relations with the MVPI scales would be more diffuse. Finally, we judged that there would be no good counterpart of the SDS Realistic scale

in the MVPI. Table 3.1 shows the intercorrelations between the two inventories and as seen, the highest single relation is between the SDS Artistic scale and the MVPI Aesthetic scale ($r = .66$). This is followed by the correlation between SDS Conventional and MVPI Commercial scales ($r = .51$) and the correlation between SDS Investigative and MVPI Scientific scales ($r = .46$). As predicted, the SDS Enterprising scale correlated with MVPI scales of Commercial, Recognition, and Power at .51, .51, and .48, respectively. Similarly, the SDS Social scale was most closely associated with both the MVPI Altruism and Affiliation scales— $r = .41$ and .37, respectively. The MVPI scale that comes closest to representing the SDS Realistic construct is Scientific ($r = .34$).

TABLE 3.1

Scale	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Aesthetic	-.12	.03	.66***	.34***	.13*	-.03
Affiliation	-.11	-.05	.15*	.37***	.35***	.07
Altruistic	-.08	.01	.26***	.41***	.13*	.12
Commercial	.15*	.16*	-.04	.13*	.51***	.51***
Hedonistic	-.05	.01	.05	.11	.20**	-.01
Power	.06	.18**	-.02	.19**	.48***	.26***
Recognition	.06	.09	.16*	.25***	.51***	.20**
Scientific	.34***	.47***	-.09	-.10	.18**	.00
Security	.01	.03	-.10	.01	.02	.15*
Tradition	.03	-.06	.14*	.17*	.11	.02

Note. $N = 167$; * $p < .10$; ** $p < .05$; *** $p < .01$

Note that the MVPI Hedonistic, Security, and Tradition scales have no strong counterparts on the SDS. In addition, note that the “people” scales of the MVPI—Aesthetic, Affiliation, and Altruistic—have a negative manifold with the “technical things” Realistic scale of the SDS. The same pattern of relations seen in Holland’s hexagon display of the SDS scales appears when the MVPI marker scales are placed in the same geometric arrangement. Finally, the correlations between SDS and MVPI scales that were predicted to be independent are either low or nonsignificant.

MVPI and the Myers-Briggs Type Indicator

We hypothesized that the MBTI EI scale should be highly correlated with the MVPI Affiliation scale and that the SN scale should be highly correlated with the MVPI Aesthetic scale in the positive, and with the Security scale in the negative direction. The remaining two MBTI scales (TF and JP) are poorly defined and their interpretations are not well supported by data. Therefore, it is difficult to hypothesize relations between the TF and JP scales and the MVPI scales.

Table 3.2 shows the correlations between the four MBTI scales and the ten scales of the MVPI. As seen, the highest correlation is between EI and the MVPI Affiliation scale ($r = -.71$), suggesting that the Affiliation scale is a good marker for EI. Also, strong correlations are seen between SN and the MVPI Aesthetic and Security scales in the hypothesized direction ($r = .61$ and $-.68$, respectively). These two MVPI scales appear to be good construct representatives for the S and N scales because they concern creativity—Aesthetic motives entail a preference for creative self-expression and Security motives entail a preference for the concrete and the certain. The MBTI TF scale is correlated positively with the MVPI Altruistic ($r = .40$) and negatively with the Power ($r = -.34$) and Scientific ($r = -.36$) scales. The MBTI JP scale is correlated positively with Aesthetic ($r = .29$) and negatively with Security ($r = -.40$) and Tradition ($r = -.40$).

TABLE 3.2

Correlations between the Myers-Briggs Type Indicator and the MVPI

Scale	EI	SN	TF	JP
Aesthetic	.21	.61***	.16	.29*
Affiliation	-.71***	-.10	.28	.10
Altruistic	-.29	-.11	.40**	.00
Commercial	-.21	-.30*	-.09	-.02
Hedonistic	-.15	.08	-.01	.28
Power	-.19	.02	-.34*	.02
Recognition	-.12	.19	-.03	.25
Scientific	.10	.24	-.36*	.19
Security	.00	-.68***	.09	-.40**
Tradition	-.39**	-.35*	-.09	-.40**

Note. $N = 46$; EI=Extraversion-Introversion, SN=Sensing-Intuition, TF=Thinking-Feeling, JP=Judging-Perceiving; * $p < .05$; ** $p < .01$; *** $p < .001$, one-tailed test.

The first two scales of the MBTI are well represented by MVPI variables. Affiliation is a good proxy for EI and the combination of Aesthetic and Security are good proxies for SN. However, the other MBTI-MVPI correlations may tell us more about the MBTI TF and JP scales than vice versa. High TF is associated with values for serving society and the less fortunate (+ Altruistic), lack of interest in competition, achievement, and personal advancement (- Power), and greater use of intuition than analysis (- Scientific). High JP is associated with values for the creative and needs for self-expression (+ Aesthetic), preferences for risk taking and testing the limits (- Security), and desire for novelty, experimentation, and innovation (- Tradition).

MVPI and the Hogan Personality Inventory

We hypothesized that all of the MVPI scales would be significantly related to Big-Five personality factors. We predicted that some scales would be saturated with more than one Big-Five construct whereas others would be clearly marked by a single personality factor. In addition, we anticipated some negative relations between personality and motive scales. Table 3.3 presents the results.

TABLE 3.3

Correlations between the Hogan Personality Inventory and the MVPI

	Adjustment	Ambition	Sociability	Likeability	Prudence	Intellectance	School Success
Aesthetic	-.20***	-.05**	.23***	-.01	-.18***	.39***	.17***
Affiliation	.28***	.36***	.41***	.38***	.15***	.15***	.08***
Altruistic	.10***	.08***	.03	.26***	.23***	.12***	.04*
Commercial	.11***	.25***	.21***	.13***	.18***	.19***	.16***
Hedonistic	-.34***	-.16***	.33***	-.02	-.39***	.07***	-.08***
Power	.05**	.37***	.36***	.06***	.01	.26***	.20***
Recognition	-.18***	.11***	.51***	.01	-.19***	.23***	.06**
Scientific	-.09***	-.04**	.05**	-.02	-.04*	.27***	.11***
Security	.02	-.09***	-.28***	.03	.34***	-.20***	-.11***
Tradition	.20***	.18***	-.10***	.11***	.34***	.04*	.08***

Note. $N = 2,692$; * $p < .05$; ** $p < .01$; *** $p < .001$, one-tailed test.

The Aesthetic scale is positively correlated with the HPI Intellectance scale ($r = .39$) and negatively correlated with the Adjustment scale ($r = -.20$). This negative correlation is consistent with Barron's (1965) data for various creative samples. Affiliation is correlated with all the HPI scales and the strongest relations are with HPI scales concerning interpersonal dispositions—Sociability, Likeability, and Ambition. Altruistic is correlated with the agreeable and conscientiousness dimensions of the HPI (Likeability $r = .26$; Prudence $r = .23$). The Commercial and Power scales have their highest correlations with the HPI Ambition scale ($r = .25$ and $.37$, respectively). As expected, Hedonistic is negatively related to HPI Prudence ($r = -.39$), while Prudence is positively related to Security ($r = .34$) and Tradition ($r = .34$). Recognition and Scientific are associated with a single personality construct; Recognition correlated $.51$ with HPI Sociability, and Scientific correlated $.27$ with HPI Intellectance.

MVPI and the Minnesota Multiphasic Personality Inventory

We hypothesized that about half of the MVPI scales would have significant correlates with MMPI scales and we judged that the scale to scale relations would entail specific constructs and not multiple or generalized personality dysfunctions. However, we predicted that the MMPI Hypomania (Ma) scale would have a greater number of positive MVPI correlates than any of the other scales because Ma involves high energy and self-confidence. Table 3.4 presents the results.

TABLE 3.4

	L	F	K	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
AES	-.01	.05	-.12	-.03	.07	-.10	.01	.30**	.13	.18*	.09	.25**	-.12
AFF	.05	-.11	.17*	.08	.07	.27**	-.12	-.08	.14	-.13	-.02	.11	-.48**
ALT	.14	-.12	.04	.01	.02	-.01	-.07	.06	.03	.15*	-.02	.20**	.06
CML	.18*	.05	.02	-.12	.01	-.04	-.02	-.03	.07	-.08	-.01	.15*	-.10
HDN	-.12	.16*	-.34**	.08	-.05	-.24**	-.03	-.12	-.12	.22**	.25**	.32**	-.19*
PWR	.00	.02	-.19*	.01	-.08	-.13	.03	-.06	-.01	.09	.05	.33**	-.09
REC	-.21**	.10	-.31**	.12	-.08	-.26**	.13	-.04	.03	.28**	.29**	.41**	-.21**
SCI	.10	-.09	.07	-.21**	.18*	-.02	-.11	-.16*	.03	-.15*	-.19*	.01	-.22**
SEC	.16*	-.11	-.03	-.01	-.08	-.24**	-.21**	-.25**	-.24**	-.09	-.20**	.06	.12
TRA	.31**	.01	.16*	-.10	-.05	.01	-.08	-.04	-.08	-.04	-.13	-.04	.18*

Note. $N = 133$; L = Lie, F = Fake Bad, K = Correction, Hs = Hypochondriasis, D = Depression, Hy = Hysteria, Pd = Psychopathic Deviate, Mf = Masculinity-Femininity, Pa = Paranoia, Pt = Psychasthenia, Sc = Schizophrenia, Ma = Hypomania, Si = Social Introversion; * $p < .05$; ** $p < .01$, one-tailed test.

Consistent with Barron's (1965) findings with creative samples, the Aesthetic scale is significantly related to MMPI Mf ($r = .30$); persons with high Mf scores are described as interpersonally sensitive and interested in intellectual or artistic activities. Affiliation is positively related to MMPI Hy ($r = .27$); high scores on Hy are interpreted as concern with social image and presenting self in an overly favorable way. Hedonistic is positively related to MMPI Ma ($r = .32$) and negatively related to MMPI K ($r = -.34$); this pattern suggests that the Hedonistic scale captures social, outgoing, and impulsive behavior as well as overindulgence, carelessness, and risk taking. In addition, higher Hedonistic scores reflect a willingness to be open, frank, and disclosing. Both Power and Recognition scales are associated with MMPI Ma ($r = .33$ and $.41$, respectively) which reflects initiative, energy, and apparent self-confidence. The Recognition scale correlates with MMPI Sc and Pt ($r = .29$ and $.28$, respectively) suggesting that the need for Recognition is driven by low self-confidence and feelings of inadequacy. Finally, the Tradition scale has its highest correlation with the MMPI L scale ($r = .31$), indicating that high scores on Tradition are self-consciously virtuous and reluctant to admit common faults—clergymen as a group receive high scores on the MMPI L scale.

The Altruistic, Commercial, Scientific, and Security scales have no particular interpretable correlations with the MMPI.

MVPI and the Hogan Development Survey

We hypothesized a number of relations between the motive scales and dysfunctional personality characteristics. This may seem counterintuitive because motives are desires and preferences, not personality characteristics. Nonetheless, we believe that some motive patterns should covary positively with negative personality characteristics (e.g., power and arrogance) while others should

covary negatively (e.g., affiliation and schizoid tendencies). In terms of positive covariation, we predicted that Aesthetic, Commercial, Hedonistic, Power, Recognition, and Security would be associated with some dysfunctional personality characteristics. In terms of negative covariation, we predicted that Affiliation, Altruism, Scientific, and Tradition would be associated with the absence of personality dysfunction. The results appear in Table 3.5.

TABLE 3.5

Correlations between the Hogan Development Survey and the MVPI

	RES	EXC	CAU	IMA	DUT	SKE	LEI	COL	BOL	DIL	MIS
AES	.07	.06	.09	.33**	-.02	.01	.01	.20**	.17*	-.02	.16*
AFF	-.64**	-.46**	-.48**	.23**	-.09	.04	-.19**	.46**	.31**	.04	.34**
ALT	-.25**	-.02	.17*	.04	.38**	-.04	.08	-.08	.02	.21**	-.03
CML	-.0	5.02	-.19**	.14	-.13	.28**	.22**	.16*	.50**	.25**	.29**
HDN	-.06	.07	.08	.15*	.10	.28**	.13	.15*	.11	.13	.21**
PWR	-.14*	-.06	-.33**	.37**	-.21**	.32**	.20**	.46**	.68**	.18*	.54**
REC	-.05	.01	-.23**	.42**	-.21**	.24**	.10	.58**	.68**	-.07	.52**
SCI	-.08	-.01	-.11	.21**	-.15*	.03	.09	.09	.23**	.11	.10
SEC	.06	.14*	.35**	-.39**	.37**	.02	.20**	-.43**	-.06	.41**	-.38**
TRA	-.08	.13	.12	.04	.30**	.06	.09	-.11	.02	.30**	-.06

Note. $N = 145$; RES = Reserved, EXC = Excitable, CAU = Cautious, IMA = Imaginative, DUT = Dutiful, SKE = Skeptical, LEI = Leisurely, COL = Colorful, BOL = Bold, DIL = Diligent, MIS = Mischievous; * $p < .05$; ** $p < .01$; one-tailed test.

The Power scale has more correlations with personality dysfunctions than any other MVPI scale. These include the HDS scales for Imaginative ($r = .37$), Skeptical ($r = .33$), Colorful ($r = .46$), Bold ($r = .68$), and Mischievous ($r = .54$). In addition, Power is negatively related to the HDS Cautious scale ($r = -.32$). Higher scores on the Power motive reflect charisma and energy, willingness to compete and to test the limits, attention seeking, and high self-confidence. The pattern of correlates is similar for the Recognition motive, with positive relations for the HDS Imaginative, Colorful, Bold, and Mischievous scales (r 's = .42, .58, .68, and .52, respectively).

The Security motive is correlated with both positive and negative dysfunctional dispositions. There are positive relations with the HDS Cautious, Dutiful, and Diligent scales (r 's = .35, .37, and .41, respectively) and negative relations with the HDS Imaginative and Colorful scales (r 's = -.39 and -.43, respectively). Higher scores on the Security motive reflect fearfulness and self-doubt, need for support and advice from others, and conscientiousness and attention to detail. In addition, high scorers are characterized as predictable, consistent, reserved, and lacking leadership skills. Similarly, the Affiliation scale has positive and negative correlations with dysfunctional dispositions. The HDS triad that reflects need for attention, energy, and social skill—Colorful, Bold, and Mischievous—are positively related (r 's = .46, .31, and .34, respectively) to Affiliation. The HDS triad that reflects social ineptness and inappropriate affect—Reserved, Excitable, and Cautious—are negatively correlated (r 's = -.64, -.46, and -.48, respectively) with Affiliation.

As predicted, some motives are associated with narrowly focused dysfunctional dispositions. For example, the Aesthetic scale is correlated with the HDS Imaginative scale ($r = .33$). Both Altruism and the Tradition motives are correlated with the HDS Dutiful scale (r 's = .38 and .30, respectively), indicating eagerness to please. The Commercial scale is correlated with HDS Bold ($r = .50$). Finally, neither the Hedonistic scale nor the Scientific scale is strongly related to any of the dysfunctional dispositions measured by the HDS.

MVPI and Cognitive Measures

We hypothesized that with the exceptions of the MVPI Aesthetic and Scientific scales, the remaining scales would be unrelated to cognitive ability. Both the Aesthetic and Scientific scales contain some item content that could reflect academic and intellectual interests; the underlying analytic ability would account for the correlation between motives and cognitive performance. Table 3.6 shows the correlations between the Watson-Glaser and the MVPI scales. Only one predicted relation emerged. The correlation between the Aesthetic scale and the Watson-Glaser was significant ($r = .17$), while the correlation with Scientific was not. The Watson-Glaser was positively related to Recognition ($r = .18$) and negatively related to Security ($r = -.30$) and Altruistic ($r = -.19$). Using the results from the Industrial Reading Test, Table 3.7 shows that only the correlation between Aesthetic and reading comprehension was significant ($r = .18$). Together, these results indicate that cognitive ability, as measured by tests used frequently in business and industry, is related to Aesthetic motives and unrelated to the other nine.

TABLE 3.6

Correlations Between the Watson-Glaser Critical Thinking Appraisal and the MVPI										
	AES	AFF	ALT	COM	HED	POW	REC	SCI	SEC	TRA
Watson-Glaser	.17*	.04	-.19*	.10	.15	.12	.18*	.00	-.30**	-.09

Note. $N = 117$; AES = Aesthetic; AFF = Affiliation; ALT = Altruistic; COM = Commercial; HED = Hedonistic; POW = Power; REC = Recognition; SCI = Scientific; SEC = Security; TRA = Tradition.; * $p < .05$; ** $p < .01$; one-tailed test

TABLE 3.7

Correlations Between the Industrial Reading Test and the MVPI										
	AES	AFF	ALT	COM	HED	POW	REC	SCI	SEC	TRA
Industrial Reading Test	.18*	.00	.02	.15	.07	.06	.11	.10	-.15	.02

Note: $N = 83$; AES = Aesthetic; AFF = Affiliation; ALT = Altruistic; COM = Commercial; HED = Hedonistic; POW = Power; REC = Recognition; SCI = Scientific; SEC = Security; TRA = Tradition; * $p < .05$; one-tailed test

CORRELATIONS WITH OTHERS' DESCRIPTIONS

Although test validity is at the heart of test usage, the concept is often poorly understood. The validity of a measure is often defined in practice in terms of its correlations with a few other measures and inventories chosen on the basis of sheer convenience. Some of the results in the previous section are examples of this. In our view, however, a more adequate definition of validity concerns the number of empirically supported inferences about real world performance that we can make about a test score. By far the most useful inferences concern how others will describe people with high and low scores on a particular measure. Thus, we consider correlations between scale scores and observer descriptions to be essential validity information.

Because the MVPI is useful for individualized assessment, employee development, and understanding how to manage/reward others, we also view correlations between scale scores and others' descriptions as a major source of interpretive information. We want to know whether MVPI scores are reliably correlated with observer descriptions. We also want to know about the degree to which descriptions are consistent across observers at different organizational levels (e.g., subordinates, peers, and bosses). We gathered MVPI scores and observer descriptions for six samples in two organizations. People completed the MVPI while at work and anonymous observers described them using a special checklist.

The first set of results is based on subordinates' ($N = 500$) descriptions of their managers ($N = 99$) in a large metropolitan hospital in the southwest. These are labeled "Subordinate" in Table 3.8. The second set of results is peers' ($N = 200$) ratings of managers ($N = 74$) at the same hospital. Managers completed the MVPI and observers evaluated them for 55 descriptive phrases using a 5 point rating scale where "5" indicated strongly agree and "1" indicated strongly disagree. The 55 descriptive phrases were developed from behaviors known to be associated with effective and ineffective organizational performance. These results are labeled "Peer" in Table 3.8. The third set of results is based on bosses' ($N = 35$) descriptions of subordinates ($N = 155$) in a large transportation company in the southeast. Subordinates completed the MVPI and bosses evaluated them using a 200

item checklist where “Y” indicated characteristic of the subordinate, “U” indicated unsure, and “N” indicated not characteristic of the subordinate. The content of this checklist was unique in that it contained work-related behavioral items, Big-Five adjectival descriptors (Goldberg, 1992), and terms describing the 10 personality disorders (American Psychiatric Association, 1995). Inclusion of personality disorders descriptors restores an evaluative component to the emotionally homogenized “non-evaluative” trait lists typically used in personality research (cf. John, 1990). These results are labeled “Boss” in Table 3.8.

Correlations between observers’ ratings across three organizational levels and MVPI scores appear in Table 3.8. The correlations between Aesthetic motives and subordinates’ and peers’ descriptions reflect, on the one hand, flexibility, assigning work to develop new skills, and having good working relations with customers. On the other hand, high scorers for Aesthetic motives are seen by their bosses as flighty, quick to anger, easily bored, nonconforming, and disorganized.

The pattern of correlations between Affiliation scores and peer descriptions reflect frequent communication, willingness to share credit, and willingness to provide constructive feedback. Subordinates describe these high scoring managers as not projecting a clear vision and not listening to the workforce. Bosses see high Affiliation subordinates as trusting, kind, conforming, comfortable meeting new people, and also encouraging constructive feedback. Consequently, peers and bosses regard high Affiliation scores in positive terms—social, considerate, communicative, and conforming; subordinates of high Affiliation bosses, however, see a person who is disorganized, won’t confront problem employees, and talks, but won’t listen.

The pattern of correlations for the Altruistic scale reflects concern for the well being of the work group. Peers and bosses describe high scorers as conducting organized meetings, keeping others informed, fostering communication as well as being sympathetic, responding to advice, and having good common sense. High scorers are also seen as unassertive, unable to balance personal and work life, and frequently late for scheduled events.

The pattern of correlations between the Commercial scale and ratings reflects fairly consistent descriptions across observer group, but the description is not particularly flattering. Persons with high scores on the Commercial scale are seen by others as difficult, selfish, tough, and socially inept. Although not charming, such characteristics are useful when interactions involve negotiations, agenda setting, and holding people accountable.

TABLE 3.8

Correlations between Observers' Description Ratings and the MVPI

MVPI Scale Observers's Description Item	Observer		
	Subordinate	Peer	Boss
Aesthetic			
Assigns work that helps us learn new skills	.18**		
Controls temper in front of customers and staff	.20**		
Is flexible in uncertain situations	.13*		
Customers like working with my peer		.23**	
Peer is able to coordinate people who need to work together		.18*	
Tends to be flighty			.20**
Tends to be nonconforming			.17*
Is organized			-.17*
Is quick to become angry			.19*
Is easily bored			.22**
Affiliation			
Acts quickly and fairly when dealing with problem staff members	-.16*		
Listens to me when I have something important to say	-.17*		
Has a clear vision of where we are going as a team	-.20**		
Shares credit with all of us when we do something upper management likes		.24**	
Keeps staff informed about developments in the company		.26**	
Takes time to discuss how the team is working together		.28**	
Offers constructive feedback		.23*	
Shares positive feedback with me which makes me feel valued		.23**	
Is trusting			.24**
Enjoys meeting new people			.26**
Tends to be nonconforming			-.17*
Encourages constructive criticism			.19**
Is kind			.22**

table continues

MVPI Scale Observer's Description Item	Observer		
	Subordinate	Peer	Boss
Altruistic			
Fosters open communication	.16*		
Responds quickly to requests	.17**		
Keeps staff informed about developments in company	.22**		
Maintains proper balance between personal and work life		-.37***	
Is on time for work, appointments, and meetings		-.29***	
Conducts meetings in well organized way		.23**	
Is assertive			-.17*
Is sympathetic			.18*
Has good common sense			.17*
Responds to advice			.17*
Commercial			
Customers like working with my supervisor	-.25***		
Controls temper in front of staff and customers	-.20**		
Is calm when working under pressure	-.20**		
Shares credit with us when we do something upper management really likes		-.26**	
Listens to me when I have something important to say		-.24**	
Easy for my peer to work with a variety of people		-.22**	
I am hesitant to disagree with my peer		.25*	
Places team objectives above personal goals			-.21**
Tends to be nonconforming			.21**
Is easy going			-.24**
Is socially inept			-.21**
Is the life of the office			-.25**
Is practical			.18*

table continues

MVPI Scale Observer's Description Item	Observer		
	Subordinate	Peer	Boss
Hedonistic			
Controls temper in front of customers and staff	.15*		
Is calm when working under pressure	.18**		
Does what is promised when it is promised		-.23**	
Knows strengths and areas to improve		-.20**	
Tends to be dramatic			.17*
Is flirtatious			.33**
Is the life of the office			.21**
Engages in horseplay			.21**
Power			
Accepts difficult challenges	.16*		
Works hard for the company	.15*		
Has a clear vision of where we are going as a team	.21**		
Shares credit with us when we do something upper management really likes		-.18*	
Shows a genuine interest in me and understands when I need help		-.17*	
Allows us to make our own decisions		-.27*	
Is assertive			.18*
Is a follower			-.27**
Is self-restrained			-.21**
Lacks leadership skills			-.20**
Tests the limits			.23**
Recognition			
Shares credit with us when we do something upper management really likes	-.18**		
Does what is promised when it is promised	-.14*		
Takes responsibility for mistakes	-.16*		
Represents staff concerns accurately to upper management		.21*	
Conducts meetings in a well organized way		.26**	
Meets team objectives		.23**	
Shares training and developmental activities (n = 39)		.30**	
Is a follower			-.18*
Engages in horseplay			.34**
Encourages conflict			.19*

table continues

MVPI Scale Observer's Description Item	Observer		
	Subordinate	Peer	Boss
Scientific			
Places team objectives above personal goals	.18**		
Accepts difficult challenges	.19**		
Follows company rules and procedures	.23**		
Is on top of new technical and business information		.36***	
Conducts meetings in a well organized way (n = 45)		.25**	
Is empathetic			-.19*
Is kind			.22**
Is quick to become angry			.22**
Lacks leadership skills			-.14*
Is easily bored			.21**
Security			
Is patient and considerate even when the work load is heavy	-.20**		
Is on time for work, appointments, and meetings	.19**		
Follows company rules and procedures	.19**		
Allows us to make our own decisions	-.20**		
Acts quickly and fairly when dealing with problem staff members		.17*	
Is able to coordinate people who need to work together		-.20**	
Easy for my peer to work with a variety of people		-.25**	
Is on time for work, appointments, and meetings		.20**	
Avoids social encounters			.18*
Is a follower			.20**
Is quiet			.22**
Is self-restrained			.21**
Fears performance appraisals			.21**
Works well alone			.19*
Acts in a socially appropriate manner			.21*

table continues

MVPI Scale Observers's Description Item	Observer		
	Subordinate	Peer	Boss
Tradition			
I am proud to be a part of this team			.15*
Is trusting	-.32***		-.23**
Tends to be suspicious			.18*
Fails to examine alternative courses of action			.26**
Has good common sense			.27**
Responds to advice			-.20**
Is flirtatious			.20*
Has odd attitudes			

* $p < .10$ ** $p < .05$ *** $p < .01$, one-tailed test.

The pattern of correlations for Hedonistic scores and subordinates' ratings indicate that high scorers are seen as calm under pressure, even-tempered, and striking a balance between work and family. Peers rate persons with high scores for Hedonistic as failing to deliver on promises and failing to recognize their own strengths and weaknesses. Bosses see Hedonistic subordinates as flirtatious, the life of the office, dramatic, and prone to engage in horseplay.

The pattern of correlations for Power scores and subordinates' and bosses' ratings are fairly consistent. They describe persons with high scores for Power as leaders—not followers, aggressive, pushing the limits, accepting challenge, working hard, and having a vision. Peers, on the other hand, describe their high Power scoring peers as bossy and pushy (“Won’t allow us to make our own decisions”), arrogant (“Won’t share credit with us”), and indifferent (“Doesn’t show genuine interest in me”). These descriptors demonstrate how the achievement behavior of power oriented people is viewed by different constituencies in the organization.

The pattern of correlations for Recognition motives varies by observer group. Subordinates describe high scoring bosses as not sharing credit, not taking responsibility for mistakes, and not trustworthy. Peers describe high scoring peers as sharing developmental opportunities, doing a good job in meetings, and meeting objectives. Bosses describe high scoring subordinates as attracting the attention of others (“Engages in horseplay”), encouraging conflict, and not being a good follower.

The pattern of correlations for the Scientific scale suggests that high scorers value innovation and technical developments, are efficient and organized, and become easily bored.

The pattern of correlations for the Security scale reflects concern for conformity, seriousness, rigidity and lack of leadership skills. Bosses describe subordinates with high Security scores, on the one hand, as socially appropriate, quiet, and restrained and, on the other hand, as fearing performance appraisal and working best alone, as a follower, and as avoiding social encounters.

The observer descriptions for the Tradition scale come almost exclusively from bosses' ratings of subordinates. In this sample, bosses described persons with high scores for Tradition as responding to advice from superiors, having good common sense, and as trusting. They are also described as not flirtatious, as not likely to examine alternative courses of action, and as having odd attitudes. Curiously, there were no significant peer correlates of peer Tradition scale scores. Finally, the highest correlation ($r = -.32$) across the observer groups was negative and between subordinates' ratings for the item “I am proud to be part of this team” and bosses' Tradition scale scores. This seems to reflect how subordinates react to bosses who are overly concerned with procedures and ensuring that everyone follows the rules. This captures the morale depressing effect of micro-management.

CHAPTER 4

Interpretations and Uses

SCALE BY SCALE INTERPRETATION

The scales on the MVPI are a reasonable sample of the range of human motives identified during 80 years of academic research. Values, preferences, and interests are all motivational concepts; they differ primarily in terms of their generality—values are the broadest and most abstract kind of motive, and interests are the narrowest and most concrete kind of motive. These motivational concepts tell us about a person's desires and plans, and they explain the long-term themes and tendencies in a person's life.

There are two ways this motivational information can be useful. First, it can be used to evaluate the fit between a person's interests and the psychological requirements of jobs; thus, the MVPI can be used to help people choose occupations or careers. Second, the inventory can be used to evaluate the fit between a person's values and the climate of a particular organization; thus, the MVPI can be used to help people think strategically about their current careers.

Measures of motives, values, and interests are somewhat different from personality measures. Personality measures tell us what a person may do in certain situations, whereas value and interest inventories tell us what a person wants to do. Moreover, people tend not to distort their answers on interest measures because their values and aspirations are part of their identity and they are normally eager to discuss them. Finally, motives, values, and preferences are remarkably stable; they tend to change very little as a person grows older—what interests you now will probably interest you later.

The next section defines the scales on the MVPI and provides three levels of interpretation. These interpretations define high scores in terms of percentiles above 65 and low scores in terms of percentiles below 35.

Aesthetic

Aesthetic motives are associated with being interested in art, literature, and music, and a lifestyle guided by issues of imagination, culture, and good taste. Persons with high scores on this scale care about aesthetic values and creative self-expression, and they tend to choose careers in art, music, advertising, journalism, or the entertainment industry. They tend to be independent, bright,

original, and artistic, but also colorful, nonconforming, and impatient. People with low scores tend to be described as slow to anger, practical, and orderly.

If a person receives a **high** score on the Aesthetic scale, this then suggests that he is interested in artistic and cultural subjects, that he is imaginative and potentially creative, and that he will do his best work in environments that allow experimentation, exploration, and creativity. As a manager, he will enjoy innovation and he will care about the appearance of work products, but he may tend to be unpredictable or disorganized, and he will prefer to solve problems on his own. People with **high** scores on this scale are often described by others as unpredictable, easily bored, and testing the limits.

If a person receives an **average** score on the Aesthetic scale, this then suggests that he has some artistic interests and values, but they are not dominant factors in his life. He is more likely to be concerned about the content than the appearance of work products.

If a person receives a **low** score on the Aesthetic scale, this then suggests that he is unconcerned with aesthetic values or artistic self-expression, and that he has practical interests and a business-like style. As a manager, he will tend to be stable, predictable, and willing to follow company policy; he should also be unconcerned with issues of personal autonomy or the appearance of work products. Finally, he will tend not to be interested in innovation, possibly even resisting it.

Affiliation

Affiliative motives are associated with a need for frequent social contact and a lifestyle organized around social interaction. Persons with high scores on this scale tend to be outgoing, charming, and socially insightful, but somewhat conforming and possibly disorganized; they tend to choose careers that allow them plenty of contact with other people. Such careers include sales, supervision, mail carrier, health technician, or bartender. People with low scores on this scale tend to be described as shy, wary, and reluctant to confide in others.

If a person receives a **high** score on the Affiliation scale, this then suggests that she is adaptable, friendly, spontaneous, and outgoing, that she enjoys working with the public and dislikes working by herself. As a manager, she will tend to be kind, trusting, approachable, and a good corporate citizen, but perhaps somewhat dependent on the approval of upper management. People with high scores on this scale are often described as readily following company policy, and as being adaptable and open to criticism.

If a person receives an **average** score on the Affiliation scale, this then suggests that she has no strong preferences about working alone or with others. Unlike some people, she doesn't need to be with others; socializing with friends and colleagues is not her primary motivator.

If a person receives a **low** score on the Affiliation scale, this then suggests that she doesn't need constant or rapidly changing social contact, that she may be somewhat shy, perhaps even suspicious about others' motives, not overly concerned with social approval, that she enjoys working by herself and may not want to work in a team. As a manager, she will tend to be quiet and self-restrained, but independent and possibly not deeply concerned with pleasing her senior management.

Altruistic

Altruistic motives are associated with a desire to serve others, to improve society, to help the less fortunate, and a lifestyle organized around making the world a better place to live. People with high scores on this scale care deeply about social justice, the plight of the have-nots, and the fate of the environment. They tend to be sensitive, sympathetic, unassertive, and kindly, and they tend to choose careers in teaching, social work, counseling, and human resources. People with low scores on this scale tend to be described as good organizational citizens, but as not delegating readily or keeping others well informed.

If a person receives a **high** score on the Altruistic scale, this then suggests that he is likeable, responsible, idealistic, and good-natured. As a manager, he will listen well and be sensitive to staff and client needs, but may not be very forceful. He will enjoy helping others—including his subordinates—to enhance their careers. Such people tend to be described as unassertive, sympathetic, and considerate.

If a person receives an **average** score on the Altruistic scale, this then suggests that although he enjoys helping others, he probably won't devote his life to public service, and probably won't spend time doing volunteer work for charitable organizations. He is more likely to contribute money than time to help others.

If a person receives a **low** score on the Altruistic scale, this then suggests that he doesn't endorse altruistic values, that he tends not to be interested in helping the less fortunate citizens of society, and that he may be assertive, forceful, forthright, and willing to confront people problems. As a manager, he will tend to be direct, and perhaps more interested in productivity than staff morale and development.

Commercial

Commercial motives are associated with an interest in earning money, realizing profits, finding business opportunities, and a lifestyle organized around investments and financial planning. Persons with high scores on this scale care deeply about monetary matters, material success, and income as a form of self-evaluation. They tend to be hard working, planful, organized, practical, and mature, and they tend to be financial or market analysts, bankers, accountants, real estate

traders and developers, and stock brokers. People with low scores on this scale tend to be described as pleasant, empathic, and laid back.

If a person receives a **high** score on the Commercial scale, this then suggests that she is motivated by the prospects of financial gain, is serious about work, attentive to details, and comfortable working within specified guidelines. As a manager, she will tend to be businesslike, direct, and focused on the bottom line. People with high scores on this scale tend to be described as task-oriented, socially adroit, and serious.

If a person receives an **average** score on the Commercial scale, this then suggests that she is not indifferent to financial considerations but neither is she preoccupied with them. Money will not be a major motivator in her life. At work, other priorities will interest her more than compensation.

If a person receives a **low** score on the Commercial scale, this then suggests that she is indifferent to Commercial values and that she tends to be easy-going, impractical, and unconcerned about material success. She will not spend her spare time reading about or working on finance-related issues. As a manager, she will be sympathetic, relaxed, and loyal to her subordinates.

Hedonistic

Hedonistic motives are associated with a desire for pleasure, excitement, variety, and a lifestyle organized around good food, good drinks, entertaining friends, and fun times. Ideal occupations include restaurant critic, travel reviewer, convention site selector, wine taster, or race car driver—i.e., any occupation that involves entertainment and recreation. People with high scores on this scale like to play, to tease, and to entertain others. They tend to be dramatic, flirtatious, impulsive, and the life of the party. Persons with low scores tend to be quiet, unassertive, and predictable.

If a person receives a high score on the Hedonistic scale, this then suggests that he is expressive, playful, and changeable, and that he will prefer to work in a dynamic and fluid environment. As a manager, he will be colorful and entertaining, but unconcerned with details and he may not learn from his mistakes. People with high scores on this scale also tend to be described as lively, fun-loving, and jolly, and they have a well-developed capacity for enjoyment.

If a person receives an average score on the Hedonistic scale, this then suggests that, although he likes to have a good time, he will usually put business before pleasure. He has a normal appetite for socializing and rarely engages in excess. He won't spend much time daydreaming about his next vacation.

If a person receives a low score on the Hedonistic scale, this then suggests that he tends to be self-disciplined, formal, reserved, and careful about what he says or does. As a manager he will be alert and concerned about details; he may also seem reluctant to relax and have a good time, especially when there is work to be done.

Power

Power motives are associated with a desire for challenge, competition, and achievement. Persons with high scores on this scale care deeply about being successful, getting ahead, and getting things done. They tend to be assertive, confident, and active, but also independent and willing to challenge authority. Although high scores for Power are associated with success in any occupation, they are especially important for careers in management, politics, and sales. People with low scores tend to be described as unassertive, socially inhibited, and cooperative.

If a person receives a **high** score on the Power scale, this then suggests that she is competitive, achievement-oriented, ambitious, and strategic about her career. As a manager, she will tend to be energetic, visionary, leaderlike, and controlling, and she will be willing to disagree with her superiors. People with high scores tend to be described as having leadership skills, as challenging limits, and as socially competent. They are most happy working in organizations where there are opportunities for upward mobility, and will tend to leave when such opportunities don't exist.

If a person receives an **average** score on the Power scale, this then suggests that, although she takes pride in her achievements, there is also more to her life than her job. She is also willing to listen and to let others describe their accomplishments. Although normally cooperative, she will take a stand if she feels strongly about an issue.

If a person receives a **low** score on the Power scale, this then suggests that she is uninterested in competition, achievement, and personal advancement, and that she may be somewhat modest, unassertive, and not very strategic about her career. As a manager, she will tend to be quiet, careful about following procedures, and she won't often disagree with her superiors.

Recognition

Recognition motives are associated with a desire to be known, recognized, visible, even famous, and with a lifestyle guided by opportunities for self-display and dreams of achievement—whether or not they are actualized. Persons with high scores on this scale care deeply about being the center of attention and having their accomplishments acknowledged in public. They tend to be interesting, imaginative, self-confident, and dramatic, but also independent and unpredictable. High scores on Recognition seem especially important for successful careers in sales or politics. People with low scores on this scale tend to be described as modest, conforming, and generous.

If a person receives a **high** score on the Recognition scale, this then suggests that he is colorful, socially self-confident and impulsive, and that he handles pressure and criticism well. As a manager, he will prefer to work in teams, communicate very well with his staff, have lots of ideas, but he

may have trouble admitting his mistakes. People with high scores on this scale tend to be described as dramatic, unusual, and reluctant to share credit.

If a person receives an **average** score on the Recognition scale, this then suggests that, although he wants to be recognized for his achievements, he is also willing to share credit with others. Although public recognition is not the primary motivator in his life, he is not likely to remain silent when he is due some credit for important accomplishments.

If a person receives a **low** score on the Recognition scale, this then suggests that he tends to be modest and reserved and avoids calling attention to himself. As a manager, he will be quiet, perhaps somewhat uncommunicative, but willing to share credit with others, including subordinates.

Scientific

Scientific motives are associated with an interest in new ideas, new technology, an analytical approach to problem solving, and a lifestyle organized around learning, exploring, and understanding how things work. Persons with high scores on this scale care deeply about truth and about getting below the surface noise to solve problems correctly. They tend to be bright, curious, and comfortable with technology, and they tend to choose careers in science, technology, medicine, higher education, and engineering. People with low scores on this scale tend to be described as responsive, flexible, and willing to admit mistakes.

If a person receives a **high** score on the Scientific scale, this then suggests that she is intellectually motivated, analytical, curious, and inquiring, and that she likes working with new technology. As a manager, she will tend to be on top of new technical and business information and to be well-organized and stable, and she will also be a hard-nosed and objective problem solver. People with high scores on this scale also tend to be described as impatient, argumentative, and easily annoyed.

If a person receives an **average** score on the Scientific scale, this then suggests that although she can analyze problems in a logical and rigorous way, she is also comfortable with intuitive ways of thinking. She is as likely to engage others in problem solving as she is to research ideas on her own.

If a person receives a **low** score on the Scientific scale, this suggests that she is uninterested in science and technology, and that she is more of an intuitive than an analytical problem solver. As a manager, she should be sympathetic, open to feedback, responsive to criticism, and more comfortable working with people than with technology.

Security

Security motives are associated with a need for structure, order, predictability, and a lifestyle organized around planning for the future and minimizing financial risk, employment uncertainty, and criticism. Persons with high scores on this scale care deeply about safety, financial security, and avoiding mistakes. They tend to be quiet, conforming, and cautious, but also punctual and easy to supervise. Such people tend to earn less than they might because they are unwilling to take risks with their careers. People with low scores tend to be described as independent, open to criticism, and willing to take risks.

If a person receives a **high** score on the Security scale, this then suggests that he is cautious, polite, and attentive to details, but somewhat shy and uncomfortable around strangers. As a manager he will tend to avoid risks and to be unassertive and reluctant to solicit feedback from his staff. People with high scores tend to be described as inhibited, conforming, and lacking leadership skills, and they need a sense of job security.

If a person receives an **average** score on the Security scale, this then suggests that he enjoys taking risks when it is appropriate but that he would also rather be safe than sorry. He is not likely to perform well in situations where the chances of success are uncertain or where the future of the organization is in doubt.

If a person receives a **low** score on the Security scale, this suggests that he is outgoing, leaderlike, and enjoys testing the limits. As a manager, he should be unafraid of taking risks, assertive, open to feedback from his staff, and unconcerned about job security.

Tradition

Traditional motives are associated with a concern for morality, high standards, family values, appropriate social behavior, and a lifestyle guided by well-established principles of conduct. Persons with high scores on this scale care about maintaining tradition, custom, and socially acceptable behavior. They tend to be trusting, considerate, responsive to advice, and comfortable in conservative organizations, but also set in their ways. Persons with low scores tend to be described as unconventional, progressive, and unpredictable.

If a person receives a **high** score on the Tradition scale, this then suggests that she is stable, conscientious, and good-natured, but somewhat cautious. As a manager, she will tend to be principled and even handed, but she may be somewhat resistant to change. People with high scores also tend to be described as commonsensical, stable, and conservative.

If a person receives an **average** score on the Tradition scale, this then suggests that, although she enjoys doing things in new ways, she also appreciates the role of tradition and history as guides to behavior. She tends to appreciate both sides of political issues.

If a person receives a **low** score on the Tradition scale, this suggests that she enjoys novelty, experimentation, and innovation, and that she is somewhat liberal in her views. As a manager, she will tend to be flexible, impulsive, independent, unconventional, and willing to take risks.

SAMPLE MVPI PROFILE INTERPRETATIONS FOR HOLLAND'S OCCUPATIONAL TYPES

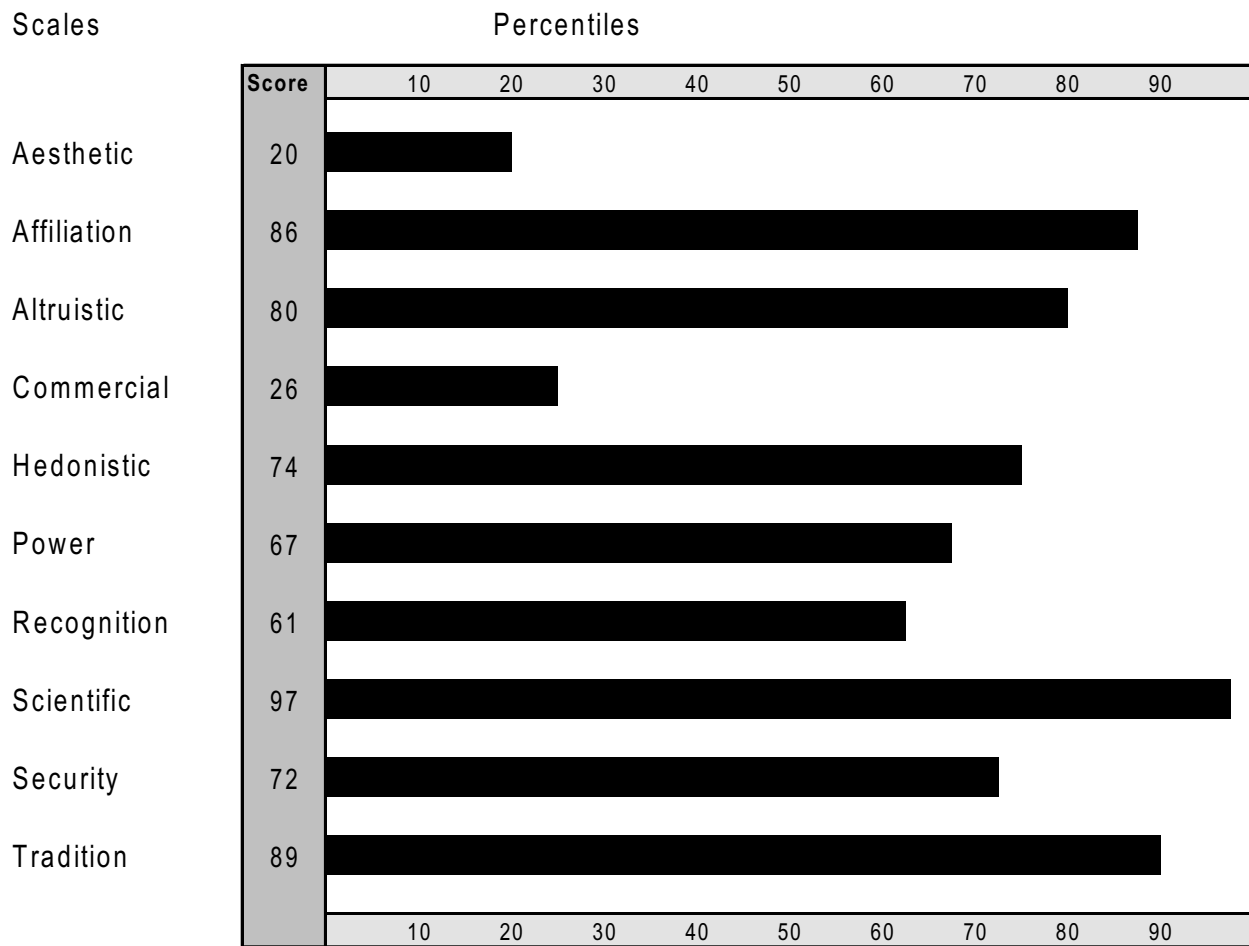
Holland's (1985a) model of vocational types is an exhaustive taxonomy for classifying personality characteristics required in occupations. Holland's model can categorize virtually every job in the Dictionary of Occupational Titles. This provides a systematic method for thinking about the types of people found in organizations. The scores in the profiles presented are percentiles based on a normative sample (N=3,015) of male and female adults.

A Realistic Profile

In Holland's theory, Realistic types are practical, concrete, action oriented, and traditionally masculine—think of a soldier, a football coach, or a mechanical engineer. They are down-to-earth, technically oriented, compliant, and a bit introverted. Figure 4.1 is the profile of a firefighter who was the top student in a class of 100 at the fire academy in a medium sized southwestern city. Although the scale scores are clearly differentiated, the pattern shows some elevation across a number of scales, indicating a range of motives and interests. Mr. R received his highest scores for Scientific, Tradition, and Affiliation motives; he received his lowest scores for Aesthetic and Commercial. This suggests that he will be interested in how things work and their technical details (Scientific), he will seek work environments with standard operating procedures (Tradition), and he will value working with others (Affiliation). He will not be interested in art, music, literature, or attractive surroundings (Aesthetic) nor will he particularly be interested in business-related and financial matters (Commercial).

FIGURE 4.1

The MVPI Realistic Profile



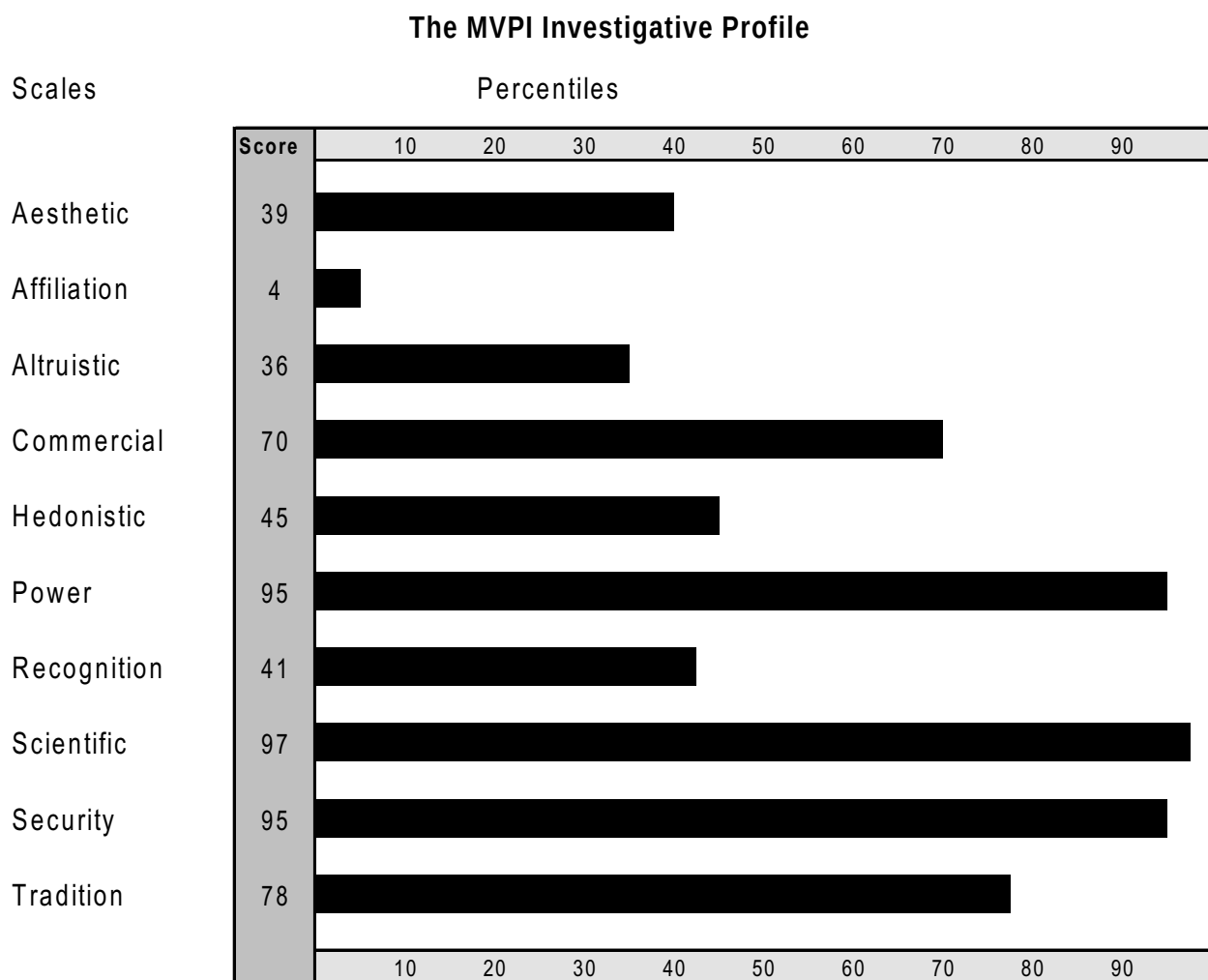
Mr. R will be seen by his boss as conscientious, having good judgment, able to solve problems, working well with others, and being a good company man. Mr. R will be seen by his peers as willing to share credit for accomplishments, being a good team player, and staying on top of technical developments.

Mr. R's boss can best motivate him with opportunities to learn new skills and techniques. In particular, many fire departments offer in-service training that is very popular with professional firefighters, because of their interest in staying current technically. Mr. R will not be motivated by salary bonuses or a chance to move into management with pay greater than that of a firefighter. This firefighter will work best in an environment that maintains conservative values (Tradition) and a job that allows him to take advantage of his analytical abilities (Scientific). He will most like to associate with people who share his conservative values, but who are friendly, helpful, analytical, and who like to get things done; conversely, he will avoid artists, liberals, and people who are preoccupied with their investments.

An Investigative Profile

In Holland's model, Investigative types are academics, researchers, people who are interested in ideas, principles, and abstractions. They tend to be somewhat introverted, rebellious, and, hopefully, creative. Figure 4.2 is the profile of a mid-career physician who is in line to be vice president and medical director of one of the largest petroleum companies in the United States. He completed the MVPI as part of an individualized assessment for career counseling. Dr. I claimed that, on the one hand, politics were preventing him from progressing in his current position and, on the other hand, he was reluctant to make waves or look for another medical director position.

FIGURE 4.2



Dr. I received his highest scores for Scientific, Power, and Security motives. He received his lowest scores for Affiliation, Altruistic, and Aesthetic motives. This suggests that he is interested in knowledge, research, and advanced technologies (Scientific) as well as control, success, and accomplishment (Power). In addition, he is careful, conservative, and uncomfortable with testing the limits

(Security). He will not be interested in working closely with other people—which is probably the reason he avoids patients (Affiliation)—and he is not particularly sympathetic to the plight of the downtrodden (Altruistic) or concerned about staff morale.

Dr. I will be seen by his boss as having good judgment, being predictable, quiet, socially appropriate, and a good company citizen. Dr. I will be seen by his staff as having a vision for the department (Power), accepting challenges (Scientific), and a good organizational citizen (Security). However, they will also see him as avoiding close relationships (Affiliation), competitive (Power), and lacking a sense of humor (Security).

Dr. I's boss can best motivate him by giving him opportunities for intellectual growth and greater responsibility with the promise that these efforts will enhance his future. If his boss had a vision for the future, he would promise Dr. I a role in the succession plan upon the boss's retirement. Although Dr. I needs a position in which he can contribute and make a difference, he also needs job security. Dr. I is not particularly responsive to attention, approval, or praise—he doesn't want to be the center of attention—although he is not indifferent to money. He will work best in a corporate culture that emphasizes security and a dedication to old fashioned values. The people with whom he will most like to associate will be other ambitious, status seeking types; conversely, he will avoid artists, entertainers, and dilettantes.

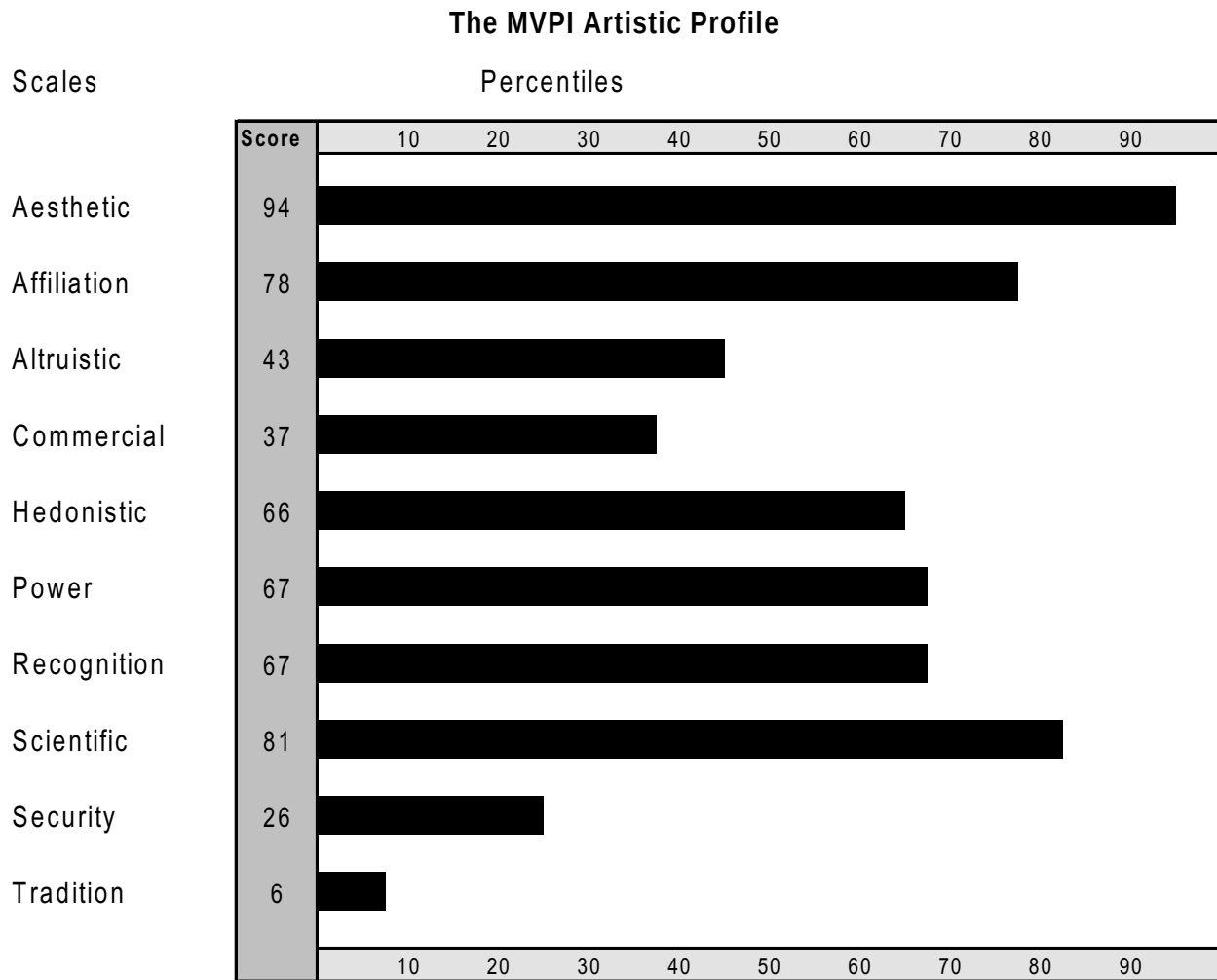
An Artistic Profile

According to Holland's theory, Artistic types—writers, architects, poets, painters—are unconventional, somewhat troubled, and more interested in self-expression than money, power, and social acceptance. Figure 4.3 is an example of a competent, non-neurotic Artistic type. Ms. A is a successful interior designer in a large mid-western United States city. She is among the senior designers in a small firm specializing in residential properties. She is recognized locally for her work and, from time to time, has received awards for her designs. Ms. A received her highest scores for Aesthetic, Scientific, and Affiliation motives; she received her lowest scores for Tradition, Security, and Commercial motives.

This suggests that she will be interested in artistic activities and will enjoy creative self-expression (Aesthetic). In addition, she is also interested in creative problem solving (Scientific), especially when it requires working with others to generate solutions (Affiliation). She is not interested in conventional rituals, organized religion (Tradition), or projects that require following procedures and “painting by the numbers” (Security).

Ms. A will be seen by her boss as easily bored, testing the limits, nonconforming, but interested in success. Ms. A will be seen by her coworkers as flexible, curious, a source of ideas, fun to be around, and flighty. Customers like working with her.

FIGURE 4.3

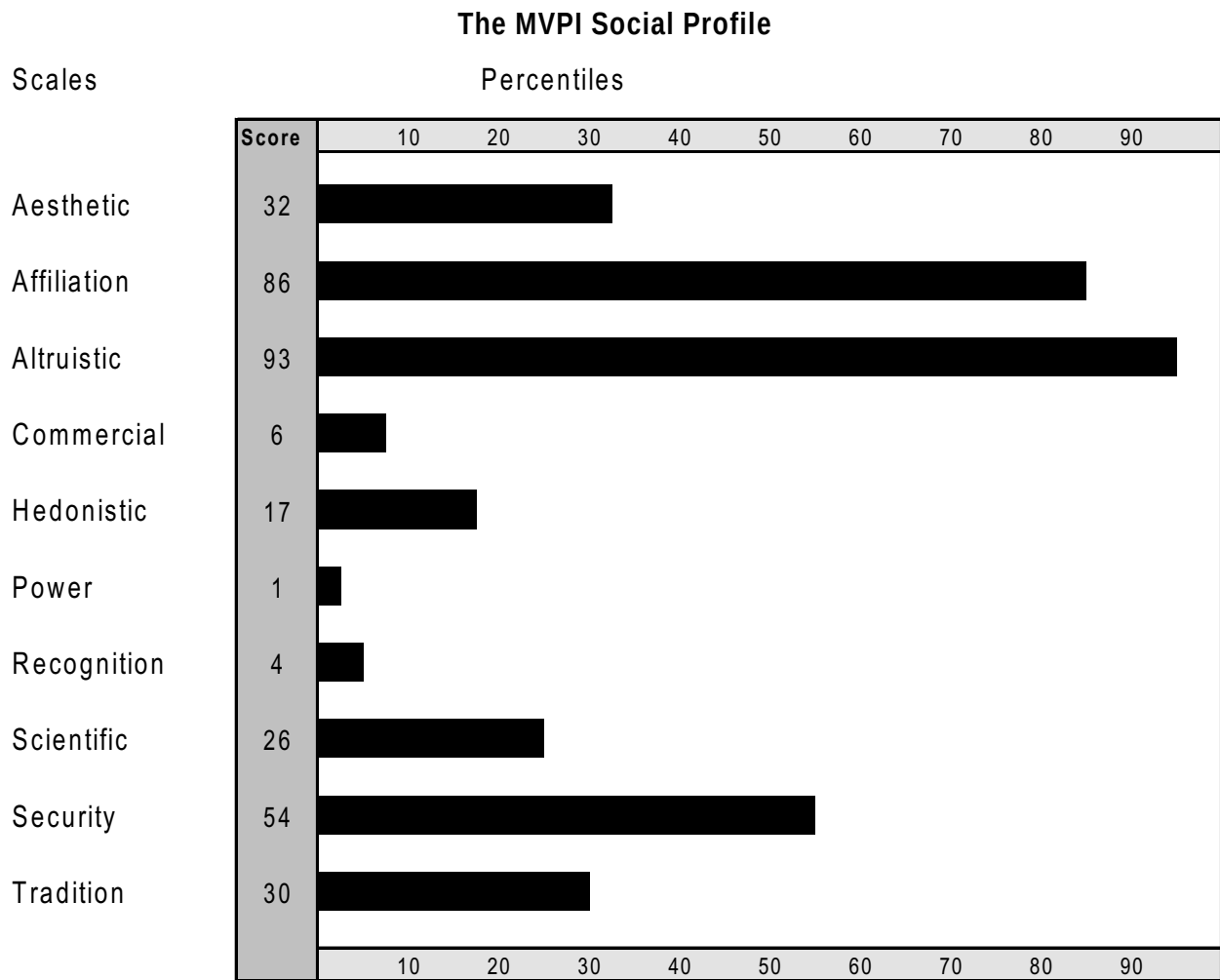


Ms. A's boss can best motivate her through opportunities to solve difficult design problems (Scientific) using her independent creative resources (Aesthetic), for people who appreciate her talents (Recognition). She will not be motivated by money or the assurance of enough projects to cover the employment needs of her immediate future. She will work best in a corporate climate that allows her to exercise her imagination through designs where product appearance is a central value. The people with whom she will most like to associate are other creative types who also like people and environments that are pleasurable and fun. She will avoid preachers, conservative politicians, and bureaucrats.

A Social Profile

Figure 4.4 is the profile of Holland's Social type. Social occupations involve helping others and providing service; social types tend to be altruistic, idealistic, unconventional, and somewhat self-sacrificing—e.g., Mother Teresa. Very successful Social types may often be better classified as Enterprising types (see discussion below), because they have a greater desire for power and influence than for social justice and helping the needy.

FIGURE 4.4



Mrs. S began her career as a registered nurse. She was an only child who sought opportunities to be with and to help other people. She nursed seriously ill research subjects. While raising her children, she volunteered for the community service charities Meals-on-Wheels and the American Red Cross. She recently returned to nursing on the staff of the Red Cross. As seen in Figure 4.4, Mrs. S has a very well differentiated profile. She received her highest scores for Altruistic and Affiliation; she received her lowest scores for Power, Recognition, and Commercial. This suggests that she is primarily interested in caring for people's needs (Altruistic) and she enjoys social interaction (Affiliation). She is clearly not interested in money (Commercial), authority (Power), or attention from others (Recognition).

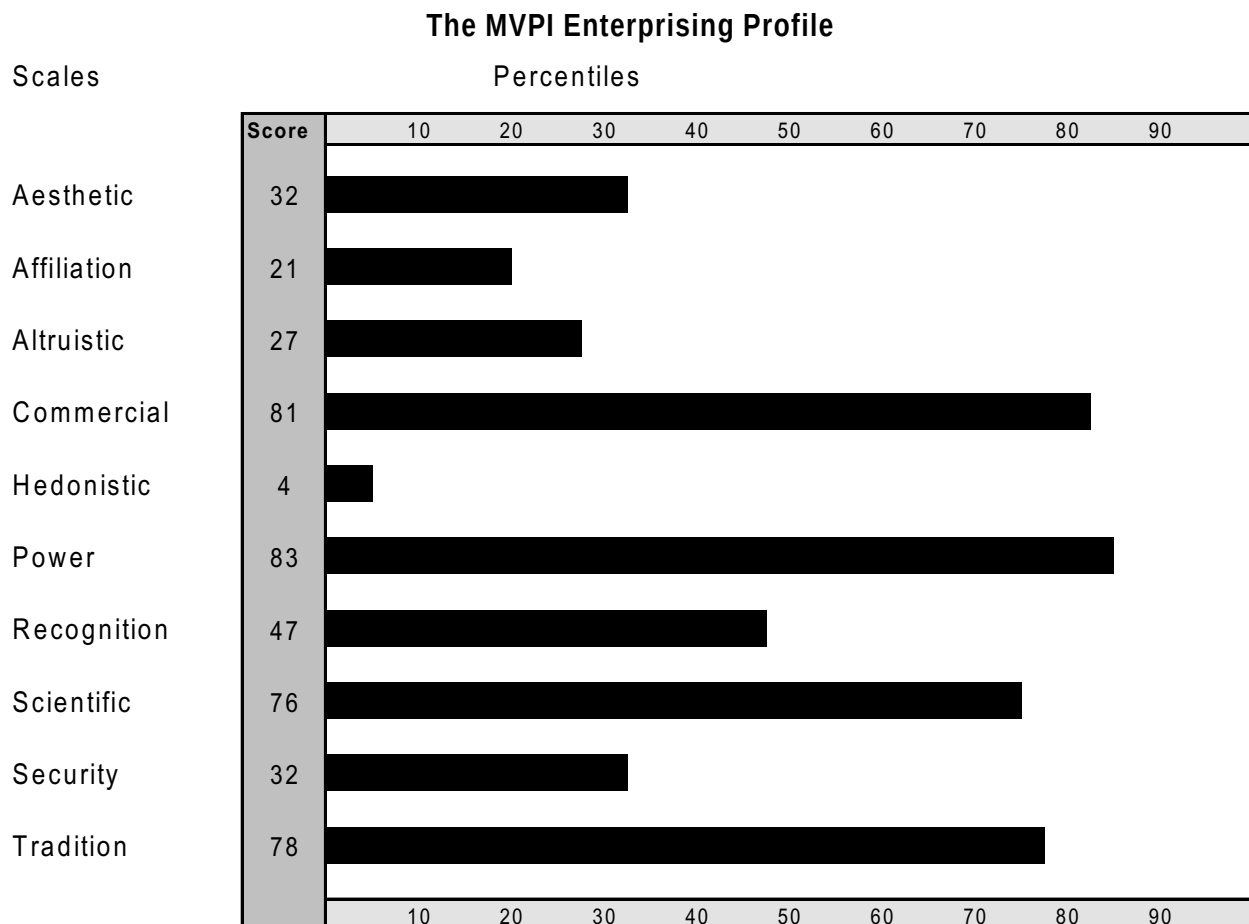
Mrs. S will be seen by her boss as sympathetic and trusting (Altruistic) as well as working well with new people and willing to confide in others (Affiliation). Mrs. S will be seen by her coworkers as calm under pressure and willing to give feedback that makes others feel good (Altruistic). In addition, she will spend time getting others to work together and to keep them informed (Affiliation).

Mrs. S's boss can best motivate her by providing opportunities to make other people feel good and contribute to their development. She will not be motivated by money, awards, citations, or opportunities to assume leadership roles. She will work best in a corporate climate where the welfare of others is the shared mission. The people with whom she will most like to associate are altruistic types who dedicate themselves to improving the lives of others. She will avoid accountants, regulators, politicians, and mean-spirited gossipers.

An Enterprising Profile

Enterprising people, according to Holland, are ambitious, upwardly mobile, socially skilled, and somewhat conforming. They are achievement oriented, and they enjoy being in charge of others. The MVPI profile in Figure 4.5 is an example of the enterprising type. Mr. E is a senior vice president and odds-on-favorite for CEO at one of the largest transportation companies in the United States. He has a well differentiated pattern of motives. He received his highest scores for Commercial, Power, Scientific, and Affiliation motives; he received his lowest scores for Altruism, Aesthetic, Hedonistic, and Security. This suggests that he will enjoy getting things done (Power), working on financial (Commercial) problems (Scientific), and working with others (Affiliation). He will not be interested in cultural events (Aesthetic), charitable activities (Altruism), or partying (Hedonistic).

FIGURE 4.5



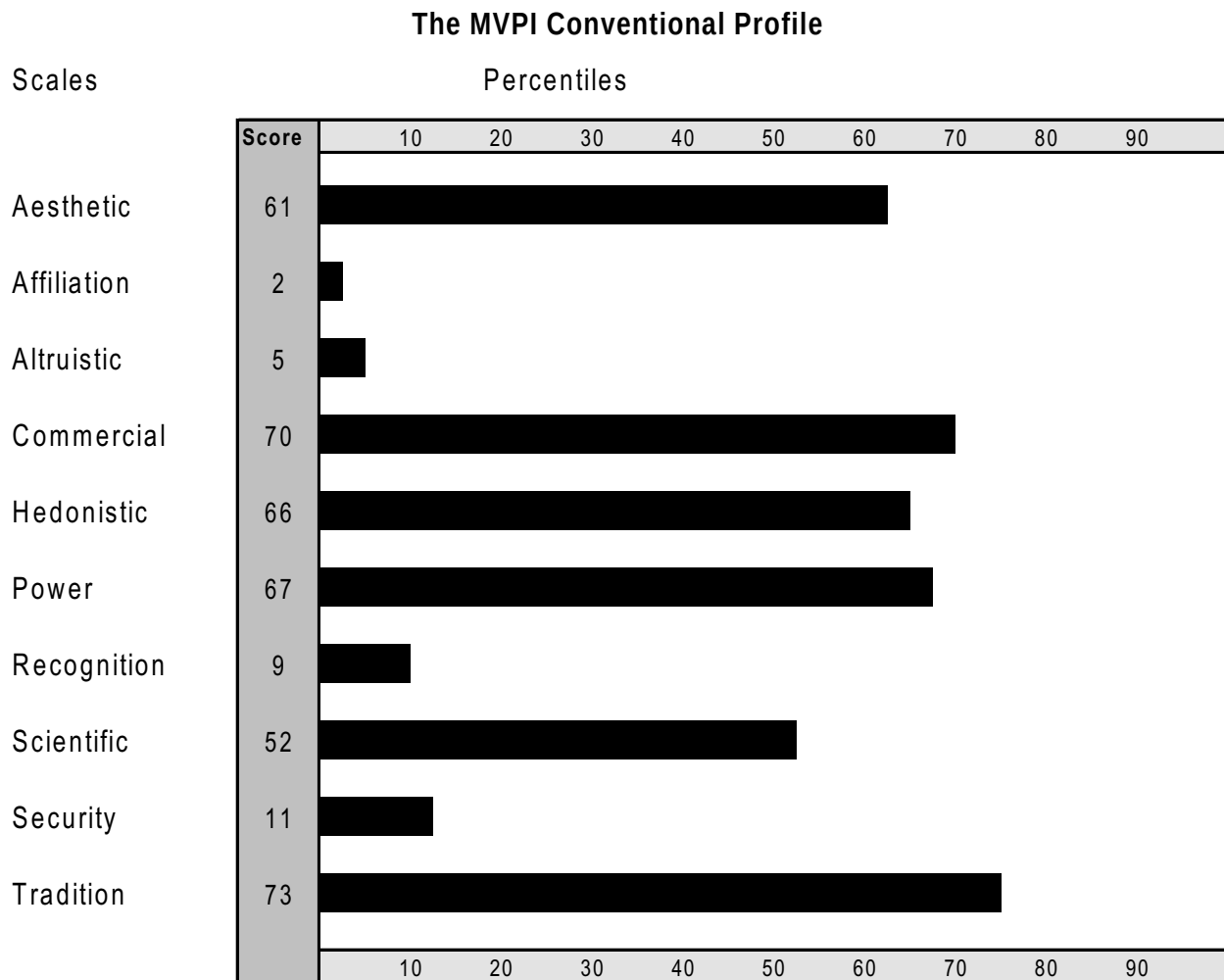
Mr. E will be seen by his boss as having leadership skills, being assertive and testing the limits, having social skills, and being a strategic problem solver. Mr. E will be seen by his subordinates as being hard working, an innovator, impatient and inconsiderate when the work load is heavy, and serious (and probably not a lot of fun).

Mr. E's boss can best motivate him by providing opportunities to solve difficult problems that have financial implications. In fact, Mr. E was consumed by a project he invented to restructure the entire pricing system for transportation services. Mr. E will not be motivated by opportunities to accrue more vacation time. He will work best in a corporate culture that emphasizes productivity and accomplishment (Power) and attainment of financial goals (Commercial). The people he will most like to associate with will be other high status, ambitious people, financial analysts, and entrepreneurs; conversely, he will avoid artists, social workers, and anyone who doesn't seem serious about his or her career.

A Conventional Profile

Conventional people, according to Holland, are in many ways the psychological opposite of Artistic types. They are careful, conforming, attentive to detail, and willing to follow instructions. Figure 4.6 is a good example of a Conventional type. Mr. C is an accountant by training who has developed a small real estate investment firm. Although he heads the firm, he spends most of his time maintaining the records and monitoring the finances of the business; it is his partners who locate the business opportunities and find the investors. In his spare time, Mr. C is very involved in the Baptist church and is an active participant on several committees. He received his highest scores for Tradition, Commercial, and Power motives. He received his lowest scores for Affiliation, Altruistic, Recognition, and Security motives. This suggests that Mr. C is interested in conservative politics and religious activities (Tradition), financial matters and opportunities to save or make money (Commercial), and he values achievement and advancement (Power). Conversely, Mr. C is not particularly interested in social interaction and will not seek opportunities to meet new people (Affiliation), nor is he interested in traditional liberal causes such as helping the downtrodden or fighting human rights abuses (Altruistic). Mr. C's church activities probably do not extend to feeding the homeless.

FIGURE 4.6



Mr. C will be seen by his board as serious, tough-minded, predictable, hard working, responsible, and having good judgment. Mr. C. will be seen by his subordinates as impatient, disagreeable with clients, noncommunicative, and unconcerned with helping others learn new skills. Although subordinates may describe Mr. C as having a vision for the company, they will also say that they are not proud to be part of his team.

Mr. C's board can best motivate him by providing opportunities for him to continue expanding the business, where the expansion is deliberate, conservative, and well-planned. He will also be motivated by financial rewards and successes. He will not be concerned about staff morale. In addition, he seems not to require recognition for his accomplishments, which is probably why he is not particularly sensitive to signs of disrespect from others. Mr. C will perform best in a climate that allows him to work hard, analyze financial problems, and make money. The people with whom he will most like to associate are conservative political and religious players with some status. He will not enjoy interacting with social workers, human resource specialists, psychologists, and environmentalists.

USES

There are three primary uses for the MVPI. The first is for career planning. Each scale on the inventory contains a subscale for vocational choice. Thus persons with high scores for Aesthetic motives should choose a career that includes opportunities for creative self-expression. Persons with high scores for Altruistic motives should choose a career that provides opportunities to help others. The Hedonistic, Power, Security, and Tradition scales don't lead to clear vocational recommendations; rather they concern people's needs for fun, achievement, security, and liberal versus conservative values. The other scales make straight forward career recommendations.

The second use for the MVPI concerns matching a person to an organizational culture. Research by Holland, Schneider, and others shows that people are happiest working in environments that are compatible or consistent with their core values. So, for example, a person with strong Altruistic motives will tend to be uncomfortable working in a financial services company where the orientation is toward profit rather than staff morale. Similarly, a person with strong Security needs would be uncomfortable working in a company like a securities trading firm where taking risks is part of the business.

A third way to use the inventory is for staff development. People with low scores on the Commercial scale are not interested in or motivated by money. A smart manager will find some other way to motivate these people. Similarly, a person with strong Power needs will be motivated by opportunities to get things done and make a mark on an organization whereas persons with weak Power needs are indifferent to such considerations.

CHAPTER 5

Administering and Scoring

The MVPI can be administered to individuals or groups using either paper-and-pencil materials or computer software. Administration procedures depend on mode of testing. Testing time requires 20 minutes or less, depending on the testing mode and the test taker's reading speed. Although the inventory is written at a third grade reading level, it is intended to be used with people who are sixteen years and older.

HOW TO ADMINISTER PAPER-AND-PENCIL MVPI FORMS

Materials

The MVPI is self-administered and consists of a 200-item booklet and an optically scannable answer sheet. Test takers should use a No. 2 pencil to complete the answer sheet. No responses are made in the test booklet; therefore, it is reusable. Items appear in blocks of five in the booklet and these correspond to the response groups on the answer sheet. This allows the respondent to keep track of his or her progress.

Completing the Answer Sheet

The answer sheet is two-sided and all information should be completed. The respondent should complete the name or identification (ID) grid, or both. If names are to be used, the respondent must print the name in the name grid and fill in the corresponding response circles on the answer sheet. If an ID number is used, the name grid can be omitted and the ID numbers placed on the back of the sheet under "Social Security Number." The circles corresponding to the ID numbers must be filled. Although both names and IDs can be used, answer sheets with neither will not be identifiable and the scored reports will contain no identifying information.

If desired, the respondent should complete the grids for race, sex, and age. These grids are located on the back of the answer sheet. Information contained in these grids cannot be used to make personnel decisions. It should be kept separate from the results of the inventory; MVPI reports which eliminate age, gender, or race information can be requested.

Conducting the Testing Session

Either individuals or groups may take the paper-and-pencil form of the MVPI. The time required to complete the inventory in this form is approximately 20 minutes. There are no basic differences between individual and group administration other than encouraging “no talking” in the latter case. A few common-sense steps are required to conduct a productive paper-and-pencil assessment session. Because the quality of the assessment results depends on the attitude with which an individual approaches the assessment, the administrator should try to build rapport with the respondent(s). Physical testing conditions should be comfortable and free from distractions.

Administrator's Script for Conducting a Testing Session

The administrator begins the paper-and-pencil session by distributing the materials and going over the answer sheet with the respondents to familiarize them with the format. As noted, there are grids on the answer sheets for name, social security number (or employee identification number), age, race, and sex. You may or may not want respondents to complete all of this information depending upon how you are using the inventory. The demographic information is useful for equal employment opportunity research purposes and should not be used in any decision making. In any case, you should explain to the respondents how the information will be used and who will have access to it. Also on the answer sheet, it is important that they fill-in some form of identification—either a name or an identification number (such as social security or employee identification).

A sample script follows that could be used by someone administering the MVPI to a group of respondents. Directions for the administrator to read out loud follow the capitalized ADMINISTRATOR and are set in boldface type. Instructions to the administrator are in parenthesis (). Administrators should maintain a courteous, pleasant tone of voice throughout the session.

Script begins:

ADMINISTRATOR: Good morning/afternoon. I'm (name). I want to welcome you to today's assessment session. To complete the assessment today, you will need a No. 2 pencil, an assessment booklet, and an answer sheet. The first thing I will do is pass out these items. Please do not start looking at the questions in the booklet until I have said to begin. Although this inventory is not timed, we will probably need about twenty minutes to complete everything.

(Pass out an answer sheet and a couple of sharpened No. 2 pencils to each respondent.)

ADMINISTRATOR: On the upper left section of the answer sheet, please print your last name first. Then print your first name using the last 10 spaces. Look below your name, and fill in the circles that match the letters in your name. Note that there is a circle to

complete for each blank box. Please make only one mark in each column of letters and use a heavy dark mark that completely fills the chosen response circle. These response circles appear in all areas of the answer sheet. By filling in the circles carefully, you ensure that the information on the answer sheet will be correctly recognized in the scanning and scoring process. If you make an error or change your mind, erase your initial choice carefully and thoroughly. Then fill in the correct circle.

(Now, if applicable:)

ADMINISTRATOR: Fill in the [social security/identification number]. This number is being used to identify your results and to match your MVPI results with other information you have completed.

ADMINISTRATOR: Please fill in the grids for race, sex, and age. This information is for EEOC research purposes only.

ADMINISTRATOR: (Next, read aloud the instructions contained in the test booklet.) Please follow along with me silently while I read the instructions found on the inside cover of the test booklet. If you have any questions, please raise your hand or come up to me after we've finished reading the instructions.

ADMINISTRATOR: (after you have finished reading the booklet instructions) Are there any questions? If not, please note that this inventory contains 200 statements to which you should respond. These statements appear in blocks of five in the booklet and the response options on the answer sheet are also in blocks of five. So, as you respond to each statement, make sure the number in the booklet is the same as the number on the answer sheet. Please respond to all of the statements, taking care to fill in the appropriate response circle and complete the entire answer sheet. When you finish, please give me your materials. I would like to thank you for your participation today. You may now begin.

(At the end of 15 minutes) As you finish, take a moment to check your answer sheet for completeness. Please check each statement, the name field, and the demographic fields.

Script ends.

Anticipate that questions may arise. Some common ones include:

- u “Can I get a copy of my results?” The usual answer for job applicants is: “No. This inventory is being used by the company to forecast job success and is not presented for purposes of feedback or counseling.” Otherwise tell the respondent the type of feedback to be given and where results can be obtained. Also for non-employment applications, explain how the individual can receive more information about test results.

- u “Do I have to respond to all of the statements?” Answer: “Try to answer as many as you can. Leave blank the statements that you feel you cannot answer.”
- u “What does statement ____ mean?” Answer: “It is better that you decide for yourself. If you cannot answer it, leave it blank.”

As testing proceeds, your role as administrator is to monitor the examination process. This includes eliminating distractions, helping individuals with questions, and collecting all completed materials. For security purposes, make sure you obtain all materials originally distributed. You should scan each completed answer sheet for neatness and completeness. Erase stray marks and make sure the circles chosen by the respondent are filled in completely and that identification appears. As the completed answer sheets are turned in, thank each respondent for participating.

HOW TO ADMINISTER COMPUTER ON-LINE TESTING

Materials

The MVPI can be taken directly on the computer. In this mode, the respondent uses the keyboard to complete the information requested on the computer screen. Each inventory question is displayed on the screen and the test taker selects and keys in a response using ‘1’ for *disagree* with the statement, ‘2’ for *uncertain*, and ‘3’ for *agree* with the statement.

The on-line testing system requires an IBM PC/XT/AT/PS2² or compatible computer with at least one floppy diskette drive, a 10 megabyte hard drive, 512 kilobytes of RAM, and 1 parallel port. The current system was developed under MS-DOS version 3.3³, however, it will operate under any DOS version 2.10 or later. A keyboard is required, but a mouse is not needed.

Software for the MVPI on-line testing, scoring, and report generating system must be installed on the computer system’s hard drive in order to operate the system. This software is available on either 5.25 inch or 3.5 inch floppy diskettes. Instructions for installation and operation of the system are available.

If printed reports are desired, a printer will be needed. The type of printer must be defined during the installation of the software. Refer to the MVPI software user’s manual for more information.

² Registered trademark of International Business Machines

³ Registered trademark of Microsoft Corporation

Using the On-Line System

The test administrator initiates the program for on-line MVPI administration. First, the test taker will see the title screen displayed and the first entry window. Using the keyboard, the test taker types in the name and ID number. Following this, instructions to complete the inventory are displayed. Using the space bar and the cursor control keys, the respondent moves through the inventory as one item at a time is displayed on the screen. The respondent may scroll back to previous items. When the test taker completes the inventory, the screen prompts the test taker to inform the administrator.

The test administrator can score the data file created using the scoring utility that is also part of the system. From the scored data, the test administrator can choose to print scores from the MVPI scales, graphs of the scales, or interpretive reports. The test scores will be stored in an archive file and may be recovered from this file later.

HOW TO SCORE THE MVPI ANSWER SHEETS

The MVPI answer sheets can be scored using any of three methods. Each of these methods is computerized and requires the use of software that scores the inventory and generates the type of report selected. Both on-site and mail-in scoring services are available. For test security, there are no hand scoring keys. Scoring methods are described next.

Keyed Data Entry

Users can score answer sheets on their own computers with MVPI scoring software, including a “Key” diskette that controls the number of tests scored. Data from the answer sheet are entered into a computer by an operator who keys in each of the 200 item responses. The system provides for multiple score sheets to be key entered and the data stored. Then, all cases are scored, and reports are generated and written to a file. The program will display the number of inventories processed, and the printing status of the report.

This method allows the user complete control of processing test results. The answer sheets are maintained at the user’s office and only the user has access to the test information. Results are immediate and printed in the user’s office. When using the ASCII text data file format scoring, refer to Figure 5.1 for the variable listing, variable names, variable order, and data definitions.

Optical Scanning of Answer Sheets

Users may score their own MVPI answer sheets by means of a computer and a scanner available from National Computer Systems. With this equipment, completed MVPI answer sheets are loaded into the scanner tray and an operator activates the scanning program. The operator does not key in the test responses. The scanner reads the marked answers and sends the data to a computer file.

Mail-in or FAX Scoring

For users who do not score tests on-site, answer sheets can either be mailed or FAXed to Hogan Assessment Systems for processing. For mailing, answer sheets should not be folded; they should be marked properly with a No. 2 pencil, and in good condition. Tests will be processed the business day they are received and reports will be returned according to the user's instructions. For FAXed answer sheets, the user should transmit a cover sheet with report return instructions followed by a copy of the MVPI answer sheet. Answer sheets should be completed using clear, dark marks. FAX transmissions will be processed the business day they are received and reports will be returned according to the user's instructions.

FIGURE 5.1

MVPI Data File Variable Specifications

Raw Data File			
Record	Variable	Columns	Coding Values
All	Case #	1-3	
All	Record	5-6	
1	Name	8-37	Last name, First name, no comma, no middle initial, all caps
1	Id Number	38-46	Social security number, 9 digits only
1	Gender	48	1 = Male, 2 = Female
1	Age	50-51	2 digits
1	Race	53	1 = American Indian, 2 = Asian, 3 = Black, 4 = White, 5 = Hispanic, 6 = Other
2	I1-I50	8-57	1 = disagree
3	I51-I100	8-57	2 = uncertain
4	I101-I150	8-57	3 = agree
5	I151-I200	8-57	blank = missing

Continued on page 62.

Scored Data File

Record	Variable	Columns	Coding Values
1	Name	8-37	Last name, First name, no comma, no middle initial, all caps
1	Id Number	38-46	Social security number, 9 digits only
1	Gender	48	1=Male, 2=Female
1	Age	50-51	2 digits
1	Race	53	1=American Indian, 2=Asian, 3=Black, 4=White, 5=Hispanic, 6=Other
2	AES_L AES_B AES_O AES_A AES_P AFF_L AFF_B AFF_O AFF_A AFF_P ALT_L ALT_B ALT_O ALT_A ALT_P COM_L COM_B	8-75	Theme Scores
3	COM_O COM_A COM_P HED_L HED_B HED_O HED_A HED_P POW_L POW_B POW_O POW_A POW_P REC_L REC_B REC_O REC_A	8-75	Theme Scores
4	REC_P SCI_L SCI_B SCI_O SCI_A SCI_P SEC_L SEC_B SEC_O SEC_A SEC_P TRA_L TRA_B TRA_O TRA_A TRA_P	8-71	Theme Scores
5	AES AFF ALT COM HED POW REC SCI SEC TRA	8-47	Scale Scores
6	PAES PAFF PALT PCOM PHED PPOW PREC PSCI PSEC PTR	8-47	Scale Score Percentiles

figure continues

Variable Names & Labels

Theme Labels		Theme Labels	
AES_L	Aesthetic - Lifestyles	TRA_L	Tradition - Lifestyles
AES_B	Aesthetic - Beliefs	TRA_B	Tradition - Beliefs
AES_O	Aesthetic - Occupational Preferences	TRA_O	Tradition - Occupational Preferences
AES_A	Aesthetic - Aversions	TRA_A	Tradition - Aversions
AES_P	Aesthetic - Preferred Associates	TRA_P	Tradition - Preferred Associates
AFF_L	Affiliation - Lifestyles		
AFF_B	Affiliation - Beliefs		
AFF_O	Affiliation - Occupational Preferences		
AFF_A	Affiliation - Aversions		
AFF_P	Affiliation - Preferred Associates		
ALT_L	Altruistic - Lifestyles	AES	AESTHETIC
ALT_B	Altruistic - Beliefs	AFF	AFFILIATION
ALT_O	Altruistic - Occupational Preferences	ALT	ALTRUISTIC
ALT_A	Altruistic - Aversions	COM	COMMERCIAL
ALT_P	Altruistic - Preferred Associates	HED	HEDONISTIC
COM_L	Commercial - Lifestyles	POW	POWER
COM_B	Commercial - Beliefs	REC	RECOGNITION
COM_O	Commercial - Occupational Preferences	SCI	SCIENTIFIC
COM_A	Commercial - Aversions	SEC	SECURITY
COM_P	Commercial - Preferred Associates	TRA	TRADITION
HED_L	Hedonistic - Lifestyles		
HED_B	Hedonistic - Beliefs		
		PAES	AESTHETIC PERCENTILE
		PAFF	AFFILIATION PERCENTILE
		PALT	ALTRUISTIC PERCENTILE
		PCOM	COMMERCIAL PERCENTILE
		PHED	HEDONISTIC PERCENTILE
		PPOW	POWER PERCENTILE
		PREC	RECOGNITION PERCENTILE
		PSCI	SCIENTIFIC PERCENTILE
		PSEC	SECURITY PERCENTILE
		PTRA	TRADITION PERCENTILE
HED_O	Hedonistic - Occupational Preferences		
HED_A	Hedonistic - Aversions		
HED_P	Hedonistic - Preferred Associates		
POW_L	Power - Lifestyles		
POW_B	Power - Beliefs		
POW_O	Power - Occupational Preferences		
POW_A	Power - Aversions		
POW_P	Power - Preferred Associates		
REC_L	Recognition - Lifestyles		
REC_B	Recognition - Beliefs		
REC_O	Recognition - Occupational Preferences		
REC_A	Recognition - Aversions		
REC_P	Recognition - Preferred Associates		
SCI_L	Scientific - Lifestyles		
SCI_B	Scientific - Beliefs		
SCI_O	Scientific - Occupational Preferences		
SCI_A	Scientific - Aversions		
SCI_P	Scientific - Preferred Associates		
SEC_L	Security - Lifestyles		
SEC_B	Security - Beliefs		
SEC_O	Security - Occupational Preferences		
SEC_A	Security - Aversions		
SEC_P	Security - Preferred Associates		

To request test scoring from Hogan Assessment Systems, include the company name, complete address, contact person, and telephone number along with the answer sheets to be scored. Send completed answer sheets with scoring instructions to:

Hogan Assessment Systems, Test Scoring Services
P.O. Box 521176
Tulsa, OK 74152

FAX transmissions to:

Hogan Assessment Systems, 918-749-0635

Contact Hogan Assessments Systems for more details at 918-749-0632.

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APPENDIX A

MVPI NORMS FOR THE TOTAL SAMPLE (N=3,015)

SCORE	AESTHETIC	AFFILIATION	ALTRUISTIC	COMMERCIAL	HEDONISTIC	POWER	RECOGNITION	SCIENTIFIC	SECURITY	TRADITION
0-19	---	---	---	---	---	---	---	---	---	---
20	1	0	0	0	0	0	0	0	0	0
21	1	0	0	0	0	0	0	0	0	0
22	3	0	0	0	1	0	0	0	0	0
23	4	0	0	0	1	0	0	1	0	0
24	8	0	0	0	2	0	0	1	0	0
25	10	0	0	0	2	0	0	2	1	0
26	16	0	0	1	4	0	1	3	1	0
27	20	0	1	1	6	0	1	4	1	1
28	26	0	1	1	8	0	2	7	2	1
29	31	1	1	1	10	1	3	9	3	1
30	38	1	1	2	14	1	4	12	4	2
31	43	1	1	3	17	1	5	14	5	2
32	48	1	1	4	23	2	8	18	7	3
33	52	1	2	5	27	2	9	21	8	4
34	57	2	2	7	33	2	12	25	11	5
35	60	3	2	9	37	3	15	28	13	6
36	64	3	3	12	44	4	20	33	16	8
37	68	4	4	14	48	6	22	37	19	11
38	72	5	5	18	54	8	28	42	24	14
39	75	6	6	22	59	9	31	45	27	17
40	78	8	8	27	66	12	36	51	33	21
41	80	9	10	31	70	15	40	55	37	25
42	83	12	12	38	74	20	46	60	43	30
43	85	15	14	42	77	24	50	65	47	34
44	88	19	17	49	82	28	56	70	55	40
45	89	22	20	53	85	33	61	74	60	44
46	91	27	24	59	89	40	66	79	67	50
47	92	32	27	64	90	45	70	82	72	54
48	93	40	32	70	93	54	75	86	80	59
49	95	46	37	75	94	60	79	88	84	63
50	96	56	43	81	96	67	84	91	90	69
51	96	62	48	85	98	72	87	93	92	73
52	97	73	55	90	99	79	91	95	96	78
53	98	78	60	93	99	83	92	96	97	82
54	98	87	68	96	99	88	95	97	99	87
55	99	90	73	97	100	91	96	98	99	89
56	99	96	80	99	100	95	98	99	100	92
57	99	97	85	99	100	97	99	99	100	94
58	100	99	93	100	100	99	100	100	100	97
59	100	100	96	100	100	100	100	100	100	98
60	100	100	100	100	100	100	100	100	100	100

APPENDIX B

SAMPLE MVPI REPORT

MOTIVES, VALUES, PREFERENCES INVENTORY

Intepretive Report

by Robert Hogan, Ph.D.

RESULTS FOR

Name: **John Sample**

ID Number: **378584037**

Date: **1 July 1996**

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Introduction

The scales on the Motives, Values, Preferences Inventory (MVPI) are an adequate sampling from the entire range of human motives, based on 80 years of academic research. Values, preferences, and interests are all motivational concepts; they differ primarily in terms of their generality--values are the most broad and abstract kind of motive, and interests are the most narrow and specific kind of motive. These motivational concepts tell us about a person's desires and plans, and they explain the long-term themes and tendencies in a person's life.

There are two ways this motivational information can be useful. First, it can be used to evaluate the fit between a person's interests and the psychological requirements of jobs; thus, the MVPI can be used to help people choose occupations or careers. Second, the inventory can be used to evaluate the fit between a person's values and the climate of a particular organization; thus, the MVPI can be used to help people think strategically about their current careers.

Measures of motives, values, and interests are somewhat different from personality measures. Personality measures tell us what a person may do in certain situations, whereas value and interest inventories tell us what a person wants to do. Moreover, people tend not to distort their answers on interest measures because their values and aspirations are part of their identity and they are normally eager to discuss them. Finally, motives, values, and preferences are remarkably stable; they tend to change very little as a person grows older--what interests you now will interest you later.

Name: **John Sample**
Date: **1 July 1996**

Page: **3**

The scales on the MVPI are defined as follows:

- Aesthetic: High scorers value creative and artistic self-expression
- Affiliation: High scorers value frequent and varied social interaction.
- Altruistic: High scorers value actively helping others and improving society.
- Commercial: High scorers value business activities, money, and financial gain.
- Hedonistic: High scorers value fun, good company, and good times.
- Power: High scorers value competition, achievement, and worldly success.
- Recognition: High scorers value fame, visibility, and publicity.
- Scientific: High scorers value ideas, technology, and rational problem solving.
- Security: High scorers value certainty, predictability, and risk-free environments.
- Tradition: High scorers value history, tradition, and old-fashioned virtues.

The next page presents your profile on the MVPI; the profile is then interpreted on the following pages.

Name: **John Sample**
Date: **1 July 1996**

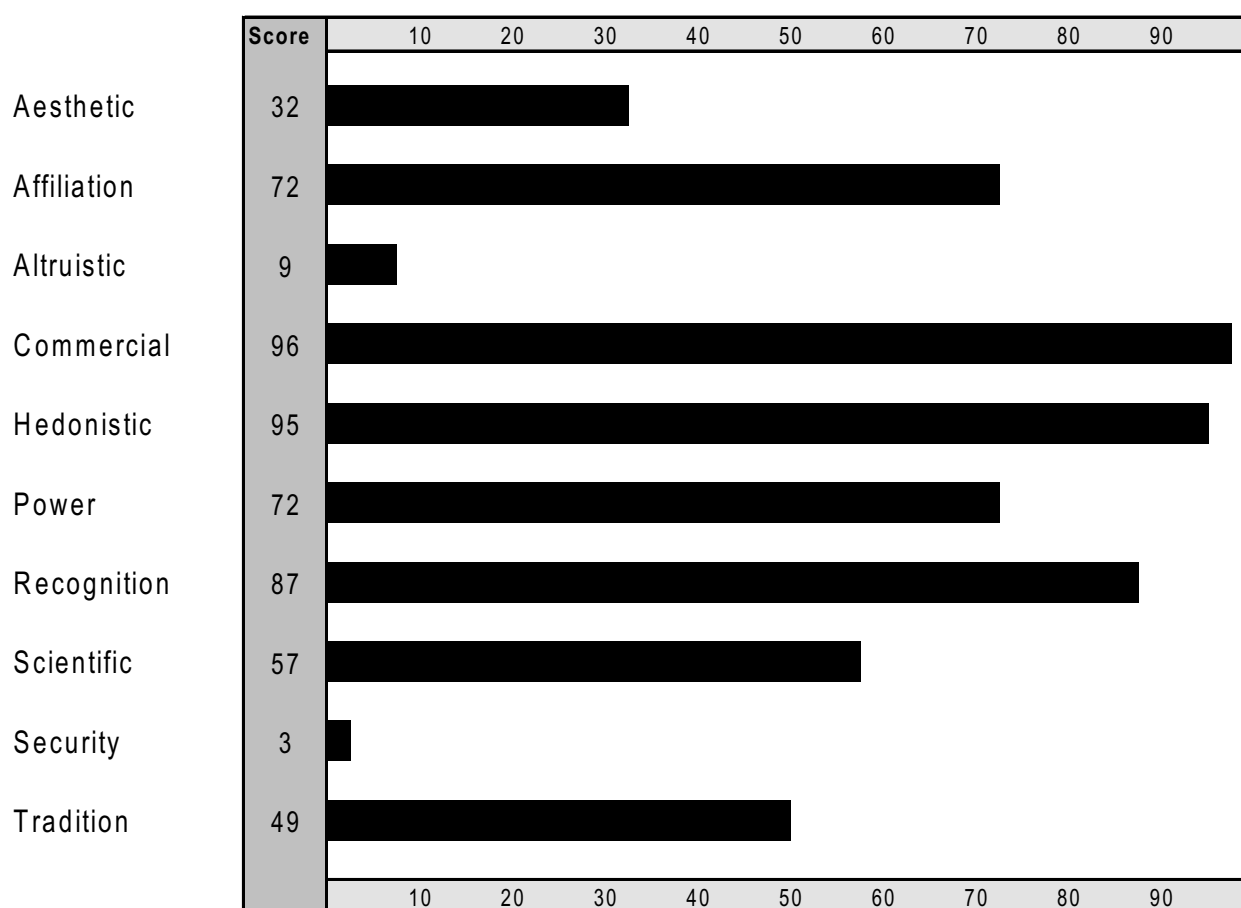
Page: **4**

Motives, Values, Preferences Inventory

Graphic Profile

Scales

Percentiles



Aesthetic 32%

Aesthetic motives are associated with an interest in art, literature, and music, and a lifestyle guided by issues of imagination, culture, and good taste. Persons with high scores on this scale care about aesthetic values and creative self-expression, and they tend to choose careers in art, music, advertising, journalism, or the entertainment industry. They tend to be independent, bright, original, and artistic, but also colorful, nonconforming, and impatient. People with low scores tend to be described as slow to anger, practical, and orderly.

Mr. Sample received a low score on the Aesthetic scale. This suggests that he is unconcerned with aesthetic values or artistic self-expression, and that he has practical interests and a businesslike style. As a manager, he will tend to be stable, predictable, and willing to follow company policy; he should also be unconcerned with issues of personal autonomy or the appearance of work products. Finally, he will tend not to be interested in innovation, possibly even resisting it.

Affiliation 72%

Affiliative motives are associated with a need for frequent social contact and a lifestyle organized around social interaction. Persons with high scores on this scale tend to be outgoing, charming, and socially insightful, but somewhat conforming and possibly disorganized; they tend to choose careers that allow them plenty of contact with people. Such careers include sales, supervision, mail carrier, health technician, or bartender. People with low scores on this scale tend to be described as shy, wary, and reluctant to confide in others.

Mr. Sample received a high score on the Affiliation scale. This suggests that he is adaptable, friendly, spontaneous, and outgoing, that he enjoys working with the public and dislikes working by himself. As a manager, he will tend to be kind, trusting, approachable, and a good corporate citizen, but perhaps somewhat dependent on the approval of upper management. People with high scores on this scale are often described as readily following company policy, and as being adaptable and open to criticism.

Altruistic 9%

Altruistic motives are associated with a desire to serve others, to improve society, to help the less fortunate, and a lifestyle organized around making the world a better place to live. People with high scores on this scale care deeply about social justice, the plight of the have-nots, and the fate of the environment. They tend to be sensitive, sympathetic, unassertive, and kindly, and they tend to choose careers in teaching, social work, counseling, and human resources. People with low scores on this scale tend to be described as good organizational citizens, but as not delegating readily or keeping others well informed.

Mr. Sample received a low score on the Altruistic scale. This suggests that he doesn't endorse altruistic values, that he tends not to be interested in helping the less fortunate citizens of society, and that he may be assertive, forceful, forthright, and willing to confront people problems. As a manager, he will tend to be direct, and perhaps more interested in productivity than staff morale and development.

Commercial 96%

Commercial motives are associated with an interest in earning money, realizing profits, finding business opportunities, and a lifestyle organized around investments and financial planning. Persons with high scores on this scale care deeply about monetary matters, material success, and income as a form of self-evaluation. They tend to be hard working, planful, organized, practical, and mature, and they tend to be financial or market analysts, bankers, accountants, real estate traders and developers, and stock brokers. People with low scores on this scale tend to be described as pleasant, empathic, and laid back.

Mr. Sample received a high score on the Commercial scale. This suggests that he is motivated by the prospects of financial gain, serious about work, attentive to details, and comfortable working within specified guidelines. As a manager, he will tend to be businesslike, direct, and focused on the bottom line. People with high scores on this scale tend to be described as task-oriented, socially adroit, and serious.

Hedonistic 95%

Hedonistic motives are associated with a desire for pleasure, excitement, and variety, and a lifestyle organized around good food, good drinks, and fun times. Ideal occupations include restaurant critic, travel reviewer, convention site selector, wine taster, or race car driver-i.e., any occupation that involves entertainment and recreation. People with high scores on this scale like to play, to tease, and to entertain others. They tend to be dramatic, flirtatious, impulsive, and the life of the party. Persons with low scores tend to be quiet, unassertive, and predictable.

Mr. Sample received a high score on the Hedonistic scale. This suggests that he is expressive, playful, and changeable, and that he will prefer to work in a dynamic and fluid environment. As a manager, he will be colorful and entertaining, but unconcerned with details and may not learn from his mistakes. People with high scores on this scale also tend to be described as lively, fun-loving, and jolly, and they have a well-developed capacity for enjoyment.

Power 72%

Power motives are associated with a desire for challenge, competition, and achievement. Persons with high scores on this scale care deeply about being successful, getting ahead, and getting things done. They tend to be assertive, confident, and active, but also independent and willing to challenge authority. Although high scores for Power are associated with success in any occupation, they are especially important for successful careers in management, politics, and sales. People with low scores tend to be described as unassertive, socially inhibited, and cooperative.

Mr. Sample received a high score on the Power scale. This suggests that he is competitive, achievement-oriented, ambitious, and strategic about his career. As a manager, he will tend to be energetic, visionary, leaderlike, but controlling, and he will be willing to disagree with his superiors. People with high scores also tend to be described as having leadership skills, as challenging the limits, and as socially competent. They are most happy working in organizations where there are opportunities for upward mobility, and will tend to leave when such opportunities don't exist.

Recognition 87%

Recognition motives are associated with a desire to be known, recognized, visible, famous, and with a lifestyle guided by opportunities for self-display and dreams of achievement—whether or not they are actualized. Persons with high scores on this scale care deeply about being the center of attention and having their accomplishments acknowledged in public. They tend to be interesting, imaginative, self-confident, and dramatic, but also independent and unpredictable. High scores on Recognition seem especially important for successful careers in sales or politics. People with low scores on this scale tend to be described as modest, conforming, and generous.

Mr. Sample received a high score on the Recognition scale. This suggests that he is socially self-confident and impulsive, and that he handles pressure and criticism well. As a manager, he will prefer to work in teams, communicate very well with his staff, have lots of ideas, but may have trouble admitting his mistakes. People with high scores on this scale tend to be described as dramatic, unusual, and reluctant to share credit.

Scientific 57%

Scientific motives are associated with an interest in new ideas, new technology, an analytical approach to problem solving, and a lifestyle organized around learning, exploring, and understanding how things work. Persons with high scores on this scale care deeply about truth and about getting below the surface noise to solve problems correctly. They tend to be bright, curious, and comfortable with technology, and they tend to choose careers in science, technology, medicine, higher education, and engineering. People with low scores on this scale tend to be described as responsive, flexible, and willing to admit mistakes.

Mr. Sample received an average score on the Scientific scale. This suggests that although he can analyze problems in a logical and rigorous way, he is also comfortable with intuitive ways of thinking. He is as likely to engage others in problem solving as he is to research ideas on his own.

Security 3%

Security motives are associated with a need for structure, order, and predictability, and a lifestyle organized around planning for the future and minimizing financial risk, employment uncertainty, and criticism. Persons with high scores on this scale care deeply about safety, financial security, and avoiding mistakes. They tend to be quiet, conforming, and cautious, but also punctual and easy to supervise. Such people tend not to realize their full earning potential because they are unwilling to take risks with their careers. People with low scores tend to be described as independent, open to criticism, and willing to take risks.

Mr. Sample received a low score on the Security scale. This suggests that he is outgoing, leaderlike, and enjoys testing the limits. As a manager, he should be unafraid of taking risks, assertive, and open to feedback from his staff and unconcerned about job security.

Tradition 49%

Traditional motives are associated with a concern for morality, standards, family values, and acceptable conduct, and a lifestyle guided by normal and well-established principles of conduct. Persons with high scores on this scale care about tradition, custom, and socially appropriate behavior. They tend to be trusting, considerate, responsive to advice, and comfortable in conservative organizations, but set in their ways. Persons with low scores tend to be described as unconventional, progressive, and unpredictable.

Mr. Sample received an average score on the Tradition scale. This suggests that although he enjoys doing things in new ways, he also appreciates the role of tradition and history as guides to behavior. He tends to appreciate both sides of political issues.



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