

## SOCIAL INTELLIGENCE AND PERSONALITY

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The cognitive basis of personality can be conceptualized as social intelligence. Social intelligence consists of the set of social concepts and rules that an individual brings to bear so as to construct a reading of a current life task and plan appropriate action. Social intelligence is learned and consequently it may be altered to fit newly emerging life tasks. Implications of this conceptualization for the assessment of individual differences in problem-solving about life tasks are considered.

The psychology of personality begins with the observation of individual differences in experience, thought, and action (Allport, 1937; Guilford, 1959; Murray, 1938). More than any other branch of psychology, it is concerned with the distinctive patterns of mental life that characterize the individual's unique construction of his or her life situation; how these patterns develop; and how they are expressed in social interaction. The present essay will outline a cognitive approach to personality currently being developed. The constructs of social intelligence and life tasks will be used to provide a framework for understanding and assessing the cognitive bases of personality. These aspects of personality are manifest in individual differences in social problem-solving -- in the ways in which different people interpret events and plan action in the service of their current life tasks.

Approaching the study of personality from the perspective of people's problem-solving activities has a long history within the field, from Lewin (1935) and Kelly (1955) to Lazarus (1966) and Mischel (1973). Lewin (1935) emphasized the dynamics of interaction between individual and environment, while Kelly (1955) provided the portrait of the individual as an active construer of events. These positions were sharply different from prevalent theories of human behavior as primarily reactive to internal predispositions or to external contingencies. For both Lewin and Kelly, the individual problem-solver was actively construing events on the basis of prior beliefs and experiences, while simultaneously revising beliefs and shaping behavior to best adapt to events as they evolved. These early "cognitive" theories anticipated to a considerable degree more recent "constructivist" approaches to cognition (e.g., Neisser, 1967, 1976, 1982). Because of this continuity between old and new perspectives on problem-solving activity, it is now possible to translate the ideas of Lewin and Kelly into the language of modern cognitive psychology.

The construct of social intelligence bears a strong family resemblance to recent reconceptualizations of cognitive intelligence (cf. Resnick, 1976; Sternberg, 1977, 1979) and to cognitive behavior therapists' notions of construction competencies (Meichenbaum, 1977; Mischel, 1973) and social problem-solving skills (D'Zurilla & Goldfried, 1971; McFall, 1982; Spivack, Platt & Shore, 1976). For example, Sternberg's (1979) information-processing framework for intelligence focuses on individuals' repertoires of problem-encoding and problem-solving skills. Intelligence is not viewed as a unidimensional ability of which some people have a great deal and others less. Rather, intelligence is construed as a collection of cognitive components and meta-components used to solve specific problems; in some contexts an individual will be able to employ her intelligence repertoire easily to arrive at a solution, while in other problem contexts the same individual will have difficulties. Using the intelligence repertoire, that is, "showing intelligence" in any given problem context, is as much a process of encoding the problem as it is one of planning and actually executing a solution. Similarly, cognitive-behavior therapists place as much emphasis on the problems individuals have in "reading" or "appraising" situations as on individuals' actual behaviors in those situations (Goldfried & Merbaum, 1973; Lazarus, 1966; Meichenbaum, 1977).

The common assumption behind these approaches is that every social interaction, whether mundane or monumental, presents a problem to be solved --or, rather, an unfolding series of problems. Explicitly or implicitly, the person is asking such questions as: What is going on here? What are my goals? How can I achieve the goals I select, and how do I make a choice among the available strategies? What are the consequences of being wrong, and how can I recover from my mistakes?

In the social domain, some problems are well defined, in the sense that the information present in the situation is so rich and unambiguous that there is a high degree of social consensus as to how the problem is to be constructed and how it is to be solved. Such "problems" hardly qualify as problems at all. However, most social problems are not very well structured --they permit more than one construal, and there is no single best solution; but like all problems they call for the application of the individual's intellectual resources.

Those intellectual resources, in turn, are stored in memory as knowledge which the individual draws upon in order to achieve her goals and meet life tasks. Following the usage established in cognitive psychology and artificial intelligence (Anderson, 1981; Hastie & Carlston, 1980; Winograd, 1975), a distinction may be drawn between concept (declarative) and rule (procedural) knowledge. Concept knowledge consists of facts about real and imagined objects and events in the world--in the case of social intelligence, it is knowledge about oneself, other people, and the social situations in which we encounter them. The individual's autobiographical record, or diary of personal experiences (episodic memory), is also part of conceptual knowledge (Tulving, 1972). By contrast, rule knowledge consists of the knowledge which we employ to categorize percepts, make judgments and inferences, solve problems, and perform various behavioral acts. In the case of social intelligence, these rules include those that we employ to assign people and situations to various categories, form impressions of others and make predictions about their thoughts and actions, make attributions of causal responsibility, determine what needs to be done in particular situations, and plan appropriate actions.

The present analysis of social intelligence begins with the structural elements of personality--the concepts and rules in the social intelligence repertoire. From there we turn to the dynamics of personality, as individuals use these concepts and rules to read situations and plan action. Individual differences in the social intelligence repertoire (and the associated dynamics of solving life tasks) are tied to unique social learning histories. The flexibility of human personality is exemplified in the process, however torturous, of incorporating new concepts and rules into the repertoire. Assessment of individuals' social intelligence repertoires appropriately occurs within the problem-solving contexts of individuals' mundane and monumental life tasks.

Comparison between the social intelligence analysis and that of other psychological traditions highlights the commitment of this perspective to characterizing how individuals use social intelligence to solve specific life tasks, while simultaneously tailoring their personalities in the face of life experiences. In order to comprehensively characterize personality, it is important to attend to features of the individual's life adjustment that change, as well as to enduring styles of adaptation. We feel that such a comprehensive approach has not characterized the two dominant traditions in personality research--the trait and behavioral approaches.

In characterizing enduring differences in individual's reactions to similar events, the trait tradition has deemphasized the discriminativeness and situation-specificity of an individual's behavior. By contrast, the behaviorists have stressed learning and change, as adaptation to situational contingencies, at the expense of enduring individual differences. In so doing, both traditions have built a picture of a rather passive, reactive individual; in one portrait the individual reacts primarily to internal predispositions, while in the other portrait the reaction is primarily to external contingencies. In our view, these portraits place insufficient emphasis on the active, constructive nature of human cognition. Interestingly, the trait and behavioral positions have recently converged in stressing cognitive processes and cognitions as mediating variables in the generation of behavior (see, for example, Atkinson [1981], Bandura [1977], and Bem & Funder [1978] on the role of expectancies, values, perceptions in the behavior generation process). However, still, insufficient emphasis is placed on the person flexibly adapting to an evolving situation and that situation being given meaning, in turn, by the person (see Lewin, 1935; Kelly, 1955; and, more recently, Mischel, 1973). The aim of a social intelligence analysis is to explicate the dynamic and the stable characteristics of individuals' interactions with their everchanging social environments.

Finally, while the social intelligence view emphasizes cognitive and social processes as determinants of individual differences, it does not ignore the role of other factors. People are creatures of a biological world, after all, and still subject to those demands and constraints. There are certainly individual differences in temperament observed in neonates, and there are certainly psychological consequences of hormonal endowments that are correlated with such factors as sex and age (Buss & Plomin, 1975; Maccoby & Jacklin, 1974). However, we strongly doubt that such biological factors have much impact independent of cognitive and social processes. They may represent a weak "genotype" for personality, setting the potential for development and the limits on experience, thought and action, but the specific phenotypes still emerge from the interaction of genetic and

environmental factors (Money & Ehrhardt, 1972). In the present essay we will concentrate on characterizing the cognitive bases of personality that emerge over time and experience, as a function of that interaction.

The Concept and Rule Repertoire:  
The Structures of Personality

Cognitive personology, and in particular a social intelligence analysis, is now in a position to draw on substantial work in social cognition and cognitive psychology (cf. Cantor & Kihlstrom, 1982; Hastorf & Isen, 1982; Markus & Zajonc, 1983) in presenting a picture of the basic structures of social intelligence. Of course, as with any complex system there are many representational models of the social concept and rule repertoire. We will present one version of a social intelligence repertoire, acknowledging it as one sample from the universe of reasonable models.

Social Concepts: Person, Situation, Self Concepts

One of the basic aspects of social intelligence is the set of social concepts that a person uses to make sense of subjective experience, interpersonal events, and impinging social stimuli. The social concepts are bundles of knowledge about "kinds of people," "kinds of situations," and "kinds of selves." Some common social concepts include: social stereotypes of men and women, Jews and WASPs (e.g., Bem, 1974; Hamilton, 1979); personality types such as achievers and altruists (e.g., Cantor & Mischel, 1979; Friendly & Glucksberg, 1970); and the situations such as blind dates, barmitzvahs, and job interviews, where we typically encounter such individuals (e.g., Cantor, Mischel, & Schwartz, 1982a). Similarly, the self concept, rather than being a monolithic, unitary mental representation of one's own personality, more likely may consist of an organized set of self concepts that are specific to particular domains or social contexts (Kihlstrom & Cantor, 1983). An individual may have concepts about: my independent self, my work self, and my Jewish self (e.g., Markus, 1977; 1979; Kihlstrom, 1983; McGuire & McGuire, 1981).

We assume that social concepts, like non-social concepts, are "fuzzy" representations of the characteristic features of category members (cf. Kihlstrom & Cantor, 1983; Smith & Medin, 1981). The mental representation of the social concept may be organized around multiple typical exemplars (e.g., specific individuals--Smith & Medin, 1981) or more abstract prototypes (e.g., lists of characteristic features--Cantor & Mischel, 1979). For example, the concept for "achiever" may be represented by a large list of correlated features (e.g., workaholic, dreams of power, values competition, very verbal) or by a set of descriptions of "achievers I have known." These descriptions, whether represented in abstract prototypes or specific exemplars, include much affect-laden ("hot") social information. The features can represent the goals, emotional reactions, behavioral plans, traits and desires typically associated with that "kind of person" or that "kind of situation."

The individual's repertoire of social concepts is clustered into networks of related concepts. Each network is also hierarchically arranged starting with very general superordinate concepts in that domain and progressively branching into more differentiated subordinate concepts. We suggest that the more specific ones are clusters of typical exemplars of the concept. We assume that concepts are organized within these associative hierarchies

according to similarity as defined by the linguistic norms of the culture (i.e., clustering via semantic and affective meaning similarity). For example, within this culture at least, people widely share the beliefs that talkative people also tend to be adventuresome, that dominant people also tend to be cold, that smart people tend to be friendly, and that when we feel pleasure we also tend to feel contentment (e.g., Norman, 1963; Rosenberg & Sedlak, 1972; Russell, 1980; Shweder, 1982; Wiggins, 1979). However, it is also essential to leave room for idiographic variation, reflecting individuals' social learning experiences. As a function of personal experience, a particular individual might associate dominant people with warmth, not coldness. That individual might also assume that people who feel pleasure are also feeling guilt rather than contentment. Examples of such idiosyncratic hierarchies have been provided by Rosenberg (1976; Rosenberg & Jones, 1972) based on cluster analyses and multidimensional scalings of a broad sample of 16 students' personal acquaintances; and by Pervin (1976), based on similar methodologies applied to the situations actually encountered by four people in their everyday lives. Within each domain the subjects' conceptual hierarchies were well structured, but they proved to be remarkably different from each other, and from the consensual hierarchies that emerge when rating data are pooled across subjects.

In considering the properties of social-concept hierarchies, it may be helpful to imagine the concept repertoire of two fictional individuals: Jack may be thought of as a stereotypical masculine male, whose social interactions are oriented around issues of agency and achievement; Jill, by contrast, may be thought of as a stereotypical feminine female, whose social interactions are oriented around issues of communality and care-taking (Bakan, 1966; Bem, 1974; Spence & Helmreich, 1978). In each case, there would be four different conceptual hierarchies at issue: "types of persons," "types of situations," "self-as-different-people," and "self-in-different-situations." The hierarchies should be construed as related to each other: for example, situation concepts contain a wealth of information concerning the types of people to be found in them (Cantor et al., 1982a). The hierarchy of "self-as-different-people" contains "possible selves" projected into the future (Markus, 1983), as well as currently actualized personalities manifested in different situational contexts (Kihlstrom & Cantor, 1983). Each hierarchy would be arranged vertically with highly abstract types at the most superordinate level, subtypes at the middle level, and specific exemplars at the lowest level. The emotional valence attached to each concept would be represented by tags-on-concepts; the valence varies in potency and positivity.

Jack, for example, probably divides his acquaintances into two broad categories, achievers (those who accomplish tasks) and facilitators (those who ease the way for other people). Being a well-socialized male, he positively values the achiever role, and he has a very rich, differentiated and highly articulated concept hierarchy, complete with multiple prototypes and exemplars. Similarly, he divides his social world into two broad types of situations, those in which he is active and those in which he is quiet. Not surprisingly, he has a richer hierarchy of the former type than the latter. These hierarchies have multiple links to his self-concept hierarchies, which (not surprisingly) emphasize achievement rather than facilitation. He doesn't have a very good idea about relaxing situations, except that he doesn't find them very rewarding; nor does he have a very good idea of what he is like as a father, except that he is vaguely similar to his own parents.

Jill may also have a superordinate concept of achiever, but for her the alternate is altruist rather than facilitator. Whereas Jack is very positive about achievers and neutral towards facilitators, Jill is highly positive about altruists and fairly negative toward achievers. Being a well-socialized feminine type, she has developed through social learning and various life experiences a rich, differentiated, and highly articulated concept hierarchy for altruists. Similarly, the social situations which she encounters are organized with emphasis on those where she can behave in accordance with her concepts of herself as an altruist; she has little idea what goes on in the corporate world of her husband. She has a very rich concept of herself as an altruist, but she finds it difficult to think of herself in any other way; she values these altruistic roles highly, and her success in them allows her to think of herself as a productive person--though she clearly defines productivity differently than Jack does.

The intrusion of differential socialization of gender roles results in some of the differences between Jack's and Jill's social concept repertoires (so might, in principle, racial, religious, or class differences in socialization); additional points of variation between repertoires reflect differences in the details of each individual's history of social experience. Individual differences are particularly noteworthy when superficially similar concepts are tagged with different affective valences--in terms of both a general preference or aversion, and a more discrete affective reaction such as astonished or glad, distressed or afraid (Bower, 1981; Clark & Isen, 1982). Because these evaluative-affective associations are learned through direct and vicarious experience, they--like all other aspects of the social concept repertoire--are more or less specific to the individual and are open to revision in the light of new experiences.

It is positively overwhelming to think about the number of different social concept networks that an individual has abstracted by adulthood--"kinds of persons" alone includes personality types (e.g., Cantor & Mischel, 1979), people in social roles (e.g., Cohen, 1981), people with various political attitudes (e.g., Judd & Kulik, 1980), and so on. It seems that by adulthood individuals possess enormous varieties of specific social concepts. However, these specific concepts may well be organized into a smaller set of basic, superordinate concepts. For example, an evolutionary-life task perspective suggests some very general adaptive tasks which map nicely onto domains also emphasized by motive and trait theorists: the hierarchy task of establishing dominance-submission orderings can be related to power motives and competitive situations; the territoriality task of exploration and establishing control-competence encompasses achievement strivings and work-play situations; the identity task of finding out "who we are" and "with whom we belong" subsumes affiliation motives and social group-affiliation situations (cf. Norman, 1963; Plutchik, 1980; Wiggins, 1979). An additional basic task, that of coping with loss-separation, might serve to organize concepts pertaining to emotional stability and safe-dangerous situations (cf. Erikson, 1950; Vaillant, 1977).

Basic concept domains derived from primitive adaptive tasks are posited at only the most abstract level of analysis. The specific form that the concept repertoire takes will be derived from the ways in which those abstract tasks are played out in the specific cultural and individual life context. But these abstract task-concept domains may provide a potential point of

departure for comparisons between individuals' social intelligence repertoires within a shared cultural context. Returning to the contrast between the sample concept networks of Jack and Jill, these networks are quite different in specifics, but cemented in the similar higher-order distinction between achievement-territoriality and affiliation-identity task domains. Within these basic domains tremendous variation occurs in the content and organization (derived from personal experiences) of the specific exemplar concepts. Moreover, Jack and Jill, as do all individuals, have different areas of social concept expertise and ignorance--therein lies another major source of individual cognitive variation. Jack is an expert about "achievers" and "work situations"--he has articulated many concepts in those domains, developed rich prototypes for the concepts and known many prototypical exemplars. Jill is relatively unconcerned with "achievers" but quite the expert about "altruistic volunteers" and "volunteer organizations"; her prototypes are well-articulated for those concepts. The social concept networks of individuals reflect their social learning histories not only in the content, affective associations and organization of the social concepts, but also in the degree of articulation of different concept domains. Individuals articulate concepts in domains highlighted by their particular social learning experiences, over the life course, with family, in educational institutions, organizations, subcultures (see Veroff, 1983). The contrast presented above between the domains of expertise and ignorance of Jack and Jill at midlife might well, then, reflect the traditional gender socialization of Americans in the 1950's in the achievement-affiliation domains (Spence & Helmreich, 1978).

The most salient and affect-laden part of the social concept repertoire is likely to involve the self concepts. We assume that the self concepts are concepts of similar structure as the other social concepts (cf. Kihlstrom & Cantor, 1983; Markus & Smith, 1981). These concepts represent the features of the "self" as different "kinds of persons" and "in different situations." Perhaps the "self as X" is represented first as an exemplar in the different persons and situations hierarchies. Then gradually, as a particular domain (e.g., self-as-parent) or context (e.g., self with client) becomes central, well-articulated and important to the "self," the individual articulates a self-concept and enters it in one of the self hierarchies. The self-concept hierarchies most likely hold the concepts which are most reflective of individual social learning histories. By the same token, individuals' cognitive selves hold the key to much of what is unique about their social interaction patterns (Kelly, 1955). The features in the self-prototypes and exemplars directly store information about present selves (patterns of preferences, abilities, goals, emotions, plans, actions), "past selves" willingly discarded as opportunities for personality change arise (e.g., going to college, getting married, entering psychotherapy, losing weight, becoming a parent), and "possible selves" (Markus, 1983) that the person is striving or hoping to realize in the future.

The self-concept hierarchies are linked with the other social concept networks; together these knowledge structures function as a vast reservoir of idiographically and nomothetically organized, highly "charged" social intelligence. The differences in social intelligence of Jack and Jill are characterized by more than just the content, organization, and areas of articulation of their social concepts. These two individuals differ with respect to areas of integration between self and person-situation hierarchies. Jack's self concepts are well-integrated (interconnected) with his other well-articulated social concepts in the domains of achievement, work,

professionalism. By contrast, he has less integration (and less embellishment) between the self and person-situation networks with respect to the domain of parenting and virtually no self-relevance for the concept of "volunteers." Again, Jill's intelligence repertoire looks integrated and articulated in quite different domains (parenting, volunteerism) than is true of Jack's repertoire. These interconnections between self and social concepts specify the individual's preferences or motives across domains. Jack, by virtue of his highly articulated and integrated concepts in the achievement domain, is likely to see quickly the achievement potential in situations and apply his concepts and rules to plan relevant behavior (cf. Atkinson, 1981).

#### Social Events: Autobiographical Memory

The self-concept system is also connected to autobiographical memory, another basic building block of social intelligence--the organized store of event memories involving the self either directly or vicariously (cf. Bower & Gilligan, 1979; Kihlstrom, 1981; Kihlstrom & Cantor, 1983). The autobiographical record (again, probably organized as a network) keeps track of episodes involving the self and preserves concrete information about the context, the order of events, subjective experience and outcomes associated with each event. These episodic networks are probably organized more according to principles of spatial and temporal contiguity than semantic or affective similarity (Kihlstrom & Evans, 1979; Mandler, 1979). However, such a network could certainly encompass hierarchical organization based on temporal epoch. For example, Jack's autobiographical memory would begin in childhood, with the first few years generally obscured by infantile amnesia (Kihlstrom & Harackiewicz, 1982; White & Pillemer, 1979), progressing through elementary and secondary school, college and law school, military service, and job; within these general epochs are more narrowly defined ones, such as second grade and freshman year, marriage right after graduation, basic training and (of course) officer candidate school, entry-level position in the firm, first and second promotions, as well as innumerable specific events. Jill's autobiographical memory will seem structurally similar to Jack's through college, but differ thereafter: marriage, a postgraduate job putting her husband through law school, first child, second child, third child; her autobiographical memory may include the events in the lives of her spouse and children, while Jack may not have a clear, organized representation of the lives of his wife and daughter.

Jack's recent memories emphasize his job, especially his preparation for and performance at a big meeting with a new client, and de-emphasize his experiences at home with his family. Jill's memories emphasize her activities at home and de-emphasize her part-time job as a docent at a local art museum. The autobiographical record keeps track not only of the event itself, but also of the individual's subjective impression of success and failure, and affective reactions; these features also serve to mark out what is important from what is trivial. It is probably largely from such records that particular approach-avoidance tendencies become associated with specific self, person, and situation concepts.

The evaluative associations to events recorded in autobiographical memory can serve as the basis for future planning: Jack knows he can take on another client because he was so successful with this one, and because he knows that his family will adjust to his career; Jill will refuse a full-time position at the museum because she recalls many past occasions when



she had to arrive late or leave early in order to attend a school play or care for a sick child. These records of past successes and failures are linked, positively or negatively, to Jack's and Jill's self, person, and situation concepts. In this way, plans, goals, and preferences are built up from specific social learning experiences.

The ongoing autobiographical record also provides for unity and coherence in the social concept repertoire. When Jack's "parent" self is activated, he can still remember what he did in his "professional" self. Jill-at-the-art-museum is aware of having shifted from her "parent" self and her memories of recent events at home help her to keep track of her other life activities. These autobiographical memories also contain affective-evaluative associations to the remembered events. The affective-evaluative tags, when integrated across many events, provide the experiential basis for self-esteem: Jack and Jill can feel equally good about themselves because they have equal amounts of positive experiences in domains that are important to them.

#### Social Rules: Reading Situations and Planning Behavior

The final component of social intelligence consists of a repertoire of rules: interpretive rules used to read situations, and action rules used to plan behavior in those situations. The individual always uses these rules in coordination with the concept repertoire. Frequently, an individual isn't aware of having this "knowledge," or if the person does infer its existence, there is no direct awareness of when it is applied, and no control over its application (Kihlstrom, 1983). The implicit use of interpretive rules and concepts is commonplace in reading situations; in order to plan behavior, individuals may be more explicit in their use of action rules and consciously think about relevant self concepts, prior experiences and social concepts. But in familiar life situations, even action rules and concepts often become "second nature," automatically run-off to plan appropriate behavior. Conversely, through interpersonal exchanges or in therapy, some of our most habitual interpretive rules and concepts may surface and receive explicit attention in reading situations.

The interpretive rules are involved in perception, memory, categorization, causal attribution, judgment, and inference in both social and nonsocial domains. We label most of these rules implicit because the individual is rarely cognizant of them or able to articulate them verbally. Nevertheless, their existence and operation can be inferred from observation of lawful patterns of performance in various cognitive tasks. In the social domain, the interpretive rules allow us to categorize ourselves, people, and situations (Cantor & Mischel, 1979; Cantor et al., 1982a; Kihlstrom & Cantor, 1983); interpret global arousal reactions and behaviors as indicative of specific emotions and preferences (Bem, 1972; Mandler, 1975; Schachter & Singer, 1962); integrate various items of information in order to form a summary impression (Anderson, 1974); infer underlying dispositions from observations of behavior and its consequences (Jones & Davis, 1965); make attributions about the causes of events (Kelley, 1967, 1972; Weiner et al., 1972); encode and retrieve information about others (Hastie, 1980, 1981); make inferences, judgments, and predictions about the future (Nisbett & Ross, 1980; Taylor & Fiske, 1978); and test hypotheses (Snyder, 1980; Swann & Read, 1981).

A very large portion of research on social cognition is devoted to expli-

cating these rules. So, for example, we know that causal attributions are determined by information concerning the consistency of the actor's behavior toward the target across a wide variety of contexts; the distinctiveness of the actor's behavior toward the target, compared to other targets; and the consensus among other actors with respect to the target. We also know that to judge the likeability of people, individuals "compute" the average likeability ratings associated with the target's various attributes, considering as well initial biases toward that person. In the course of this research, investigators have also uncovered systematic departures from or shortcuts around these rules. So, for example, the fundamental attribution error leads us to attribute a person's behavior to internal dispositions rather than situational demands or constraints. People frequently misattribute the causal antecedents of their arousal states. In making judgments, people tend to be inordinately influenced by their initial impressions, and by the ease with which examples or evidence come to mind. When we test hypotheses, we seek confirmatory rather than disconfirmatory data, and when confronted with information that is incongruent with our expectations, we try to rationalize it in terms of our prior impressions. In a self-flattering manner, we attribute our successes to ability, and our failures to effort, difficulty, or chance.

The interpretive rules are used with the social concept repertoire to read social situations. And again, there will be differences in the content of the rules and concepts brought to bear by individuals in reading a situation. In the face of a failure experience, for example, some individuals are experts at using those self-protective attribution rules; other individuals are quick to make ability attributions, judging themselves as insufficiently talented after a failure performance (Dweck & Goetz, 1978). Returning to our contrast between Jack and Jill: Jack may have become an expert at retrospective ego defensive attributions about his intermittent "failures" in the work setting; he uses defensive attribution rules in coordination with concepts about work and the work setting that center around successful, positive achievement experiences. Jill, by contrast, may have finely-sharpened rules of self-blame acquired from years of taking responsibility for problems as a parent and volunteer worker. She "knows" that children are not to be blamed, that she sometimes doesn't work hard enough in helping others, that success requires persistence. Neither Jack nor Jill is likely to be explicitly aware of the particular form that their attribution expertise or bias takes.

The other rules in the repertoire are the action rules of social exchange (cf. Athay & Darley, 1981; Kelley & Thibaut, 1978), self-presentational strategies (cf. Jones & Pittman, 1982) and social scripts (cf. Abelson, 1976), self-regulation (cf. Mischel, 1974, 1983), strategies for handling feeling states and emotional reactions (cf. Lazarus, Kanner & Folkman, 1980; Leventhal, 1983), social role-taking and communication (cf. Higgins, 1981). These action rules form the basis of the individual's plans for responding to current and anticipated events. For example, an individual may have a rule for ingratiation (Jones & Pittman, 1982); accordingly, in order to get people to like her, that individual conforms to others' expectations. Jill might well have articulated that action rule. Similarly, a principle of competition in social exchange may be represented in the action rules repertoire. Jack may have articulated a rivalry rule: Try at all times to minimize the outcome of a rival competitor. Jack may also have action rules to mask his intense emotional reactions of anger, jealousy, grief or hurt: He prefers to let out anger gradually or even in a "passive-aggressive"

fashion, rather than lose control in an explosion. A decision-making script might go as follows: Whenever I make a decision I first imagine the worst outcome possible so as to avoid extreme disappointment. Both Jack and Jill might have that rule in the repertoire, though they each may associate different behavioral plans with that rule. Jack, reading a situation as even remotely likely to lead to failure may invoke a self-handicapping strategy of withdrawing effort so that the cause of any failure isn't unambiguously associated with insufficient ability (Jones & Pittman, 1982). For Jill, by contrast, the potential for failure may activate her "try one's hardest" rule in an attempt not to let anyone else down or to disappoint them.

The action rules repertoire of a given individual may be fairly large, larger than that individual's interpretive rules repertoire. There also are very direct links represented in the individual's social intelligence repertoire between specific action rules and relevant self concepts, social concepts, and autobiographical records. Jill uses her ingratiation action rule in coordination with the relevant self-concept of altruist; there also is a direct link to the self-with-family concept, a very accessible memory of being ingratiating to a friend and a well-articulated concept of intimidators (who like to be ingratiated). Unlike the interpretive rules, the action rules are coordinated with specific concepts in the individual's repertoire. Consider Jack with his "worst case" analysis decision-making rule. In a situation which he has "read" as requiring a choice, Jack will rather automatically draw on his image as a smart person for whom failure attributable to lack of personal ability must be avoided at all costs; he will plan his performance accordingly. Similarly, Jack's rules for the regulation of emotion--especially those rules used when he feels quite upset--are intimately linked to his self-concept as a leader and to childhood memories of feeling humiliated after losing control of his emotions. Action rules represent the behavioral plans and goals that best match a person's concepts, as well as his expectancies derived from specific autobiographical memories.

When confronted with the problems posed by specific social situations, people use their social intelligence repertoires to read the meaning of the situation and plan action in accordance with their interpretations. When the situation is one that is relatively unfamiliar to the individual, this "effort after meaning" (Bartlett, 1932) is deliberate, voluntary, and can be explicitly articulated by her. When the situation is one that is relatively familiar to the individual, and especially if the problems that it poses have been satisfactorily solved in the past, this interpretative and planning activity can run off almost automatically. In the latter case, however, social behavior is not by any means "mindless," in the sense of being devoid of cognitive activity (e.g., Langer, 1978; see Cantor, Mischel, & Schwartz, 1982b; Miller & Cantor, 1982).<sup>1</sup> Whether the situation is familiar or strange, the individual constructs his reading by accessing information from his networks of social concepts pertaining to people and situations, self-concepts, autobiographical memories, rules for processing social information, and for planning action.

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<sup>1</sup>The term "mindlessness" can be construed, mistakenly, to imply the absence of cognitive activity. A more appropriate construal refers to activity which is engaged in uncritically, without conscious reflection.

Social Intelligence in Life Task Contexts:  
The Assessment of Personality

At a theoretical level, we have argued that people use their social intelligence repertoires to read situations and plan actions in service of accomplishing life tasks; and that individual differences in social behavior are determined largely by individual differences in the concepts, autobiographical memories, and rules that constitute that repertoire. At a practical level, it is incumbent on a personality theorist to indicate how these cognitive features of personality can be assessed. In this regard, we suggest that the assessment of the social intelligence repertoire is probably best carried out within the context of a specific life task which the individual is encountering now. The goal of assessment is to provide a profile of the intelligence used by the individual in the course of working on a life task. Unlike some approaches that begin with an attribute of personality—a trait or a motive or a concept or a rule—and search for its manifestations across a wide variety of situations, this approach begins with a situation—a particular life task—and looks for the attributes of personality that emerge within that context.

Choosing Life Tasks

The problems which an individual must solve through the application of social intelligence can be conceptualized at any of a number of different levels. At the most concrete, there are narrow domains such as hosting a dinner party, having a date for Saturday night, and complaining to a superior at work. At the most abstract, people appear to be striving to achieve a satisfactory position with respect to such dimensions as competence, affiliation, and dominance. In principle, any of these levels could serve as the focus for assessing social intelligence. In practice, however, it would seem most appropriate to focus on problems residing at an intermediate level of abstraction, such as selecting a career, choosing a mate, planning a family, or coping with retirement. At the most subordinate level, there are too many situational constraints, and the behavior may run off almost automatically. At the most superordinate level, the mix of goals which characterizes most social interactions, and which requires the individual to make comparisons and choices, is lost. If a person reflects on the way in which he operates in the affiliative domain in general, he may focus on physical attractiveness and reciprocal liking; if asked about strategies for a Saturday night date, he may focus on the choice between an expensive restaurant and tickets to the theatre. When reflecting on the choice of a spouse, however, he will necessarily have to consider whether they will be constantly engaged in power struggles, the impact of her career on his, as well as how much they seem to enjoy each other's company. An intermediate level seems to organize a number of different concrete problems under a common rubric, at the same time as it mixes, and forces a choice among, various proportions of superordinate life tasks.

Once a life task has been selected as the focus of assessment, the next problem is to find appropriate individuals in whom social intelligence can be assessed. Obviously, social intelligence can be assessed in anyone. But arguably the knowledge brought to bear on a specific life task can only be assessed in an individual who is actually facing this task—in individuals who are choosing a mate, planning a family, bucking for promotion, or facing retirement. In part, this proposal is dictated by a concern for ecological validity. An individual who is confronted by the prospect of

imminent retirement will find the assessment context personally involving, self-relevant, and affectively charged. Tuned into the problem, and desirous of finding a solution, the person will then be motivated to actively employ the variety of concepts, personal memories, and rules in her social intelligence repertoire in order to work on the task. By contrast, a college undergraduate asked to contemplate retirement will most likely give the investigator the intellectual equivalent of a shrug of the shoulder. In addition to concerns of ecological validity, there is also another reason for choosing subjects who are currently working on a life task: such subject selection will permit longitudinal follow-up studies to determine how the cognitive activity of problem-solving is translated into actual behavior, whether it leads to success or failure, and how the individual uses social intelligence to respond to these consequences.

### Social Intelligence Profiles

The assessment procedure proposed here is to construct a profile of task-relevant social intelligence for an individual in the context of a salient personal life task. The profile characterizes the person's task-relevant social intelligence on a number of dimensions. Expertise is related to the richness and variety in descriptions of situations, events, actions relevant to the life task. Consensuality refers to the degree of agreement between the individual's perception of those task-relevant situations, events, actions, and group perceptions. Integration is measured in terms of the match between the individual's self-descriptions and her descriptions of people, action, events characteristic in the task-relevant situations. Evaluative tone is reflected in the positive-negative tone of an individual's descriptions of himself in task-relevant situations. These features of the social intelligence profile form the basis for predictions about the "ease" or "difficulty" which the individual will have in working on the life task at hand, the ways in which that person will choose to work on that task, and the likely reactions on the part of others to those efforts. Behavioral measures of ease or difficulty with a task include verbal reports of satisfaction and conflict, as well as observable actions such as life-style choices and plans for life changes. The profile also provides guidelines for working with an individual in the development of new task-relevant expertise.

An individual's "readings" of task-relevant situations and his plans for action in those situations provide the basic data in this assessment process. Self-report methods used in research on person perception (cf. Cantor & Kihlstrom, 1982), the perception of situations (cf. Magnusson, 1980), and the self-concept (cf. Kihlstrom & Cantor, 1983) provide the basis for quantitative analysis of these data. There are many different techniques which could be used in the construction of a task-relevant social intelligence profile. For example, in order to document expertise for a life task, individuals can be asked to form visual images of the activity typically observed in each task-relevant situation. The speed of image formation, as well as the richness and distinctiveness of image content, are good measures of expertise (e.g., Cantor et al., 1982a; Goldfried et al., 1983). The consensuality of task-relevant intelligence can be observed in the following procedure: participants who are all facing a similar life task can be asked to rate the similarity between each pair of situations from a set of task-relevant situations. The match of an individual's perceptions to the group perceptions can then be measured with an individual differences multidimensional scaling algorithm (Kruskal & Wish, 1978). Similarly, methods

developed in the self-concept literature (see Greenwald & Pratkanis, 1984 for a review) can be used to demonstrate integration between an individual's self and social concepts. For example, individuals who are "schematic" (Markus, 1977) in a concept domain associated with a life task are most likely to have well-integrated self and social concepts in that domain (Markus & Smith, 1981). Integration can also be measured in terms of the number of actions which an individual can imagine himself performing in a task-relevant situation, especially when those actions form a common "script" for behavior in that situation (e.g., Abelson, 1981). Data for the evaluation dimension of the social intelligence profile may be gathered from reports of autobiographical memory (Kihlstrom & Harackiewicz, 1982; Linton, 1978). Individuals have quite vivid recollections of the positive and negative connotations of past events; these personal memories may be quite relevant to current life tasks (Robinson, 1976).

#### Adaptive and Maladaptive Life Task Profiles

The analysis of social intelligence profiles inevitably raises a discussion of the qualities that make social intelligence functional or dysfunctional, adaptive or maladaptive for a particular life task. We suggest that progress in solving a life task and satisfaction with the solution depend upon the expertise, integration, evaluative tone, and consensuality in the task-relevant social intelligence profile. This prediction derives from several lines of thought: If a person does not have sufficient expertise about task-relevant situations and behaviors, then the task will remain a mystery. However, the expertise alone will not suffice. Little progress will be made if the individual cannot imagine himself actually behaving as is required in those situations (integration). And, if evaluative associations with the task-relevant situations are negative, then no amount of expertise will help provide a solution.

The solutions provided by an individual's task-relevant repertoire must also be consensually well-validated in order to prove fruitful. If the social intelligence that an individual brings to bear in reading situations and planning action is not sufficiently negotiated with her social environment, then new problems will be created. It is not adaptive or "intelligent" to contribute one's own delusions in an effort to solve a life task. Suppose, for example, that Jill persists, even after her children have grown and established families of their own, in expecting to see her children quite frequently, participate in all important decisions and remain a "best friend" to each child. She does present a profile characterized by expertise, integration and positive evaluations. But Jill's plan for this life task is not negotiated with the reality of her changing life context or correspondent with the plans of her family. Consequently, her approach is likely to create more problems than it solves.

One of the unique features of a social intelligence analysis is that it raises questions about adaptive and maladaptive aspects of personality in familiar, non-clinical contexts. Of course, it is equally important to note that the features of a social intelligence profile that appear maladaptive for one person may be quite functional for another person in another life task context. There is no "best" or "right" social intelligence that can be specified in the abstract, without consideration of the person-life task context. In fact, the contrast between the utility of a social intelligence repertoire in solving one life task and the problems it causes in another task is of great interest to us. This contrast captures

a very crucial element of the present conceptualization--no individual can be said in the abstract to have social intelligence or not, or to be more socially intelligent than another individual. The contrast to traditional personality theories is fourfold: First, unlike trait or motive conceptualizations, social intelligence is not a unidimensional entity along which individuals can be arrayed or rank ordered. Second, one individual cannot be said to have or not have social intelligence for a life task--everyone brings social intelligence to bear in solving a life task. Third, the utility of the individual's social intelligence repertoire cannot be evaluated in the abstract, independent of the particular life task--be it mundane or monumental--which the repertoire is being used to solve. The same repertoire may make it "easy" for an individual to solve one task and "difficult" to solve another life task. And, fourth, the actual content of social intelligence changes over the life cycle as individuals learn new concepts and rules and face new tasks. Social intelligence is multidimensional, dynamic and used to solve life tasks in specific contexts, while simultaneously being reshaped and tailored to fit new tasks in new contexts.

#### Social Intelligence and Personality

In this essay, we have argued that individual differences in social behavior are determined largely by individual differences in social intelligence. Social intelligence consists of the social concepts and rules that an individual brings to bear in problem-solving about both mundane and monumental life tasks. The dynamics of social intelligence involve the application of social concepts and rules in order to read situations and plan action. These social concepts and rules are acquired through the mechanisms of cognitive development in general and social learning in particular. The social intelligence repertoires of different individuals will overlap with regard to certain concepts and rules emphasized by the culture-at-large during socialization and yet differ because many other concepts and rules are acquired through the individual's unique social learning history. Accordingly, in solving some life tasks people's readings of the situation and action plans may be quite similar, while in problem-solving on other life tasks there may be substantial individual differences. Individuals develop characteristic ways of problem-solving about specific life tasks; these favorite situation readings and preferred action plans reflect the relatively unique collection of concepts and rules in the social intelligence repertoire. But it is important to remember that a person's social intelligence repertoire also changes in the face of new learning and experiences. After all, the social intelligence analysis is based on learning theory and a commitment to change as much as to stability. The cognitive basis of personality is reasonably labelled as "intelligence" to the extent that people can learn more adaptive concepts and rules in order to solve new life tasks. Cognitive-behavior links are most likely to be understood across a long period as the individual explicitly and implicitly works with and on her social intelligence.

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# Motivation, Emotion, and Personality

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