

A COMPARISON STUDY OF INTERPERSONAL CONSTRUCT USE BETWEEN  
JUNIOR HIGH STUDENTS AND COLLEGE STUDENTS

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## ABSTRACT

The purpose of this research was to explore the similarities and differences between junior high school students' and college students' use of interpersonal constructs and the relation between those constructs and concrete behavior. It was divided into three stages. The purpose of the first stage was to examine similarities and differences between junior high students and college students in the kinds of traits they ascribe to others. Language samples containing descriptions of peers were obtained from the two groups, and two sets of analyses were conducted to provide a comparison of the number and quality of the constructs as a function of age. Most importantly, results showed consistent production differences between the two groups in the quality of the constructs employed. The second stage was designed to examine whether junior high students make the same kinds of discriminations among prototypic behaviors that college students make, and whether they organize their interpersonal constructs in a manner which is conceptually consistent with the ways college students organize their constructs. Anecdotes describing prototypical patterns of behavior were administered to both groups and a category organizing sheet was developed to record the manner in which they organized their

constructs. It was found that junior high students are unable to distinguish and give adult meanings to various types of behaviors. In addition, adult categories were significantly more dimensionally complex than those of the younger subjects. A final analysis was conducted to examine whether junior high students make the same kinds of inferences from concrete patterns of behavior to interpersonal constructs as do college students. Both groups were again provided with anecdotes containing prototypical patterns of behavior, and were asked to indicate their first and second choice responses from a checklist containing the intended constructs plus distractors. Although very good consensus was obtained from the college students, results obtained indicate that junior high students can distinguish and give at least a very general meaning to behaviors before they can label them, and that even if junior high students can distinguish behaviors and verbalize the intended construct, they most often prefer to use the conceptually consistent global construct.

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## CHAPTER I

### INTRODUCTION AND REVIEW OF THE LITERATURE

Information about others, obtained through observation and/or interaction, generally manifests itself in the form of an impression. The purpose of this study was to examine the similarities and differences between the way college students and junior high students verbalize their impressions. The process of impression formation has been a subject of social psychological inquiry for many years. Recently, the study of impression formation has also become a major focus of interpersonal communication research.

Although this research has had real theoretical import, it is also limiting in that it provides only a narrow explanation of the impression formation process. This chapter provides a review of that research. It has been divided into four sections. The first section describes a theoretical conceptualization of the impression formation process, and the justification for the use of this approach. The second section reviews competing contemporary accounts of the relationship between cognitive development and language acquisition. The third section is specifically focused upon the examination of existing child impression formation research and provides the rationale for the developmental

approach used by this study. The final section presents the problem under investigation and details the specific hypotheses developed for study.

### From the Assimilatory Tradition to the Accommodative Tradition

Studies of impression formation do not always examine how impressions grow out of concrete observations. The reason is that many researchers have been more concerned with the traits people employ in impressions than with the behaviors to which the impressions are applied. As a result, two perspectives on social-cognitive development and the impression formation process can be identified in the literature. These two perspectives have been termed the "assimilatory tradition" and the "accommodative tradition" (O'Keefe & Delia, 1982, p. 10).

The assimilatory tradition. The assimilatory tradition has been the dominant force in impression formation research from the early 1950s through the 1970s. O'Keefe and Delia (1982, p. 10) note, that in terms of Piaget's cognitive developmental theory, impression formation has been viewed as an "assimilatory process (the environment is assimilated to the cognitive system), rather than as an accommodative process (the cognitive structure fails to provide an adequate

organization of the environment and so undergoes change)." Hence, the impression formation process can best be described as a "constructive process, in which available information is translated into the categories of, and elaborated within, the implicit personality theory of the perceiver" (O'Keefe & Delia, 1982, p. 9).

Kelly (1955) suggested that "persons differ from each other in their constructions of events;" this claim is consistent with the basic presuppositions of the assimilatory tradition: persons are primarily viewed as assimilating the behaviors and characteristics of others (i.e., external structures) to an existing framework of unique and personal interpretive schemes (i.e., internal structures) (Burlison, 1984b). In other words, the environment is assimilated to the cognitive system, and hence perceivers are implicit personality theorists who seek to form organized overall impressions of others' personalities. (An extensive review of research within this tradition can be found in O'Keefe & Delia, 1982).

Another characterizing feature of this research tradition is the reliance upon variants of the research design employed by Asch (1946) in his classic study of central attributes in impression formation. In general, subjects are presented with trait lists, filmed action scenes, etc., and are asked to form an overall impression

of a target individual from the information provided (O'Keefe & Delia, 1982). The impression is then reported on an overall evaluative scale or adjective list.

While the assimilatory tradition has extensive empirical support and real theoretical value, it is also difficult to explain (or inquire into) certain impression formation phenomena from this perspective. For instance, O'Keefe and Delia (1982) note that questions such as the following have largely been ignored.

1. What processes are involved in the elaboration and organization of an impression over time as new information becomes available in varying behavioral contexts?

2. How and what kinds of interpretive and information-seeking strategies permit accommodation to new information across time and contexts?

3. How is the existing cognitive system initially formed and how is it modified over time?

Neglecting these questions has resulted in "a divorce of the study of impression formation from the study of behavior, even though it is always assumed that impressions provide the anticipations that channelize and guide action" (O'Keefe & Delia, 1982, p. 11). It is evident, however, that these questions are not easily

answered within the confines of the assimilatory tradition.

The accommodative tradition. Crockett (1977, 1982, 1983) has recently proposed another theoretical approach for the study of impression formation. This approach emphasizes the role "stimulus characteristics" play in the impression formation process (Burleson, 1984b). It provides the means by which one may examine the raw material from which impressions are formed, and how that raw material is transformed into traits which compose impressions.

If an individual is asked to describe someone else, that description would most likely be comprised of various trait-like adjectives. Crockett and Thom (1983), however, stress that what the perceiver actually observes is the way others act in specific situations (i.e., concrete behaviors). Aspects of these observable behaviors are then translated into trait-like qualities, which perceivers treat "as if they were the essence of the person's character" (Crockett & Thom, 1983, p. 1). This happens because individuals are assumed to conceive of things in terms of their dispositional qualities (Heider, 1958). Traits are the dispositional qualities we presume underlie the character and behavior of people (Crockett & Thom, 1983).

How dispositional qualities are inferred from actions remains to be answered. Crockett and Thom (1983, p. 1) emphasize the relevance of accounting for the conceptual processes which guide these inferences:

Traits are presumed to persist over time. They account for a multitude of different actions in different situations. By contrast, actions and the context in which they occur only take place once and then are ended. When we ascribe traits of character, persistent motives, or long-range goals to a person, we are often able not only to account for that person's action in the past, but also to predict how the person will act in situations that are yet to occur.

The following is a summary of the theoretical model that Crockett (1983) has proposed to explain the conceptual processes by which the inferences from action to dispositional qualities are made.

The theoretical model. The proposed model is essentially a two-step model of person perception. The fundamental unit of social cognition upon which it is based is the personal construct (Kelly, 1955). It is proposed that there are two kinds of personal constructs which serve different functions in the impression formation process, those which are termed "concrete representations," and those which are termed "interpersonal constructs" (Crockett & Thom, 1983, p. 2). Concrete representations are organizations of and selections from sensory patterns (Crockett, 1983). They

are believed by perceivers to be direct reflections of reality (i.e., they are representations of specific episodes of behavior, and are thus stored in episodic memory).

Interpersonal constructs, which correspond to dispositional qualities, are stored separately in semantic memory (Quillian, 1969). Commonly, they are expressed in the form of personality traits. These constructs are used to analyze concrete representations about a person, so as to achieve a stable, consistent impression. In other words, they give meaning to episodes.

For example, I may witness a person, whom I'll call Joan, donate one thousand dollars to a noteworthy charity. For as long as I will remember Joan, I will associate her with that specific behavior; it will be stored as a concrete representation in my episodic memory. If, however, I am asked to describe Joan, I would be much more likely to say that Joan is a generous person (i.e., use an interpersonal construct to convey my impression). If I am asked how I know that Joan is a generous person, I would say I know that because I saw her donate a thousand dollars to a charity (i.e., support my interpersonal construct with the concrete behavior that I witnessed). As Crockett (1982, p. 92) explains,

"concrete representations are what is construed, the dispositional or interpersonal constructs do the construing."

This model strongly depends upon the assumption that specific, identifiable patterns of action are "prototypic" for the attribution of particular interpersonal constructs. This aspect of the model follows the work of Rosch (1975, 1976), who has identified prototypes as the foci of organization in the process of learning natural categories. Rosch (1978, p. 30) has concluded that "categories tend to become defined in terms of prototypes or prototypical instances that contain the attributes most representative of items inside, and least representative of items outside the category." For instance, in a natural category such as "birds," prototypic members are more readily and more consensually identified; some birds (robin, sparrow) are considered to be "birdier" than others (pelican, ostrich).

In relation to the inference of interpersonal constructs, a prototype is defined as "a pattern of events which evokes a construct quickly and consistently" (Crockett & Thom, 1983, p. 3). Constructs are "fuzzy categories" (i.e., each interpersonal construct will correspond to a range of representations, varying around



a most typical, prototypic member [Crockett & Thom, 1983, p. 3]). A given interpersonal construct such as "shy," for example, is evoked by a particular pattern of action toward someone else. Although the prototypic pattern of action for "shy" may vary somewhat from situation to situation, there will be general consensus for any given situation about what that pattern would be.

Given that there are identifiable patterns of action that are prototypic for the attribution of particular interpersonal constructs, it thus becomes possible to investigate which particular patterns of action will elicit particular interpersonal constructs (Crockett, 1977). As Crockett contends, "such a question is not likely to be investigated as long as the perceiver is believed to construct an impression of others almost entirely within idiosyncratic dimensions of judgment" (O'Keefe & Delia, 1982, p. 14), as in the assimilatory tradition. Perceivers are now viewed as social psychologists, who attempt to elaborate a pattern of concepts for explaining, understanding, and predicting the other's behavior within a range of contexts (O'Keefe & Delia, 1982).

Since the interpersonal constructs which form our impressions are expressed in words, the only way one can know in detail the nature of another person's impressions

is by examining the words in which the impression is described. But an examination of the words chosen to express the impression alone is insufficient because of the relationship of the words to concrete patterns of actions as represented in constructs.

An understanding of this relationship is particularly important when examining the construct system of a child. It is reasonable to assume that the child's construct system and vocabulary grow and undergo revisions simultaneously; constructs and words influence one another as new and unanticipated patterns of action must be accounted for within the developing construct system. Two questions emerge from this assumption: (a) What is the relationship between cognition and language? and (b) Are there developmental processes which affect impression formation during the childhood years? The following section addresses each question, respectively.

#### Language and Interpersonal Construct Development in Children

Contemporary competing accounts of language acquisition. The controversies surrounding the definition of the relationship between language and cognition have deep historical roots (Rice & Kemper, 1984), and are still widely debated among language acquisition scholars. The basic issue has been

described as a "mapping problem" (Clark, 1973). Rice and Kemper (1984) comment that the major premise assumes two kinds of knowing, nonlinguistic and linguistic; these two types of knowing are not isomorphic with each other. The relationship may be described and illustrated as follows:

Nonlinguistic knowledge is on the bottom because it is more basic (it appears first ontogenetically and is less vulnerable to cerebral malfunction or fatigue effects). Linguistic knowledge is above the nonlinguistic base (as a higher-order kind of knowing) and offset, to indicate the lack of 1:1 correspondence between the two. The proportion of the overlap changes ontogenetically: there is no overlap for the prelinguistic infant, who knows a little about the world but nothing about language. With language acquisition, the amount of overlap increases to some stable and mature, yet incomplete proportion.

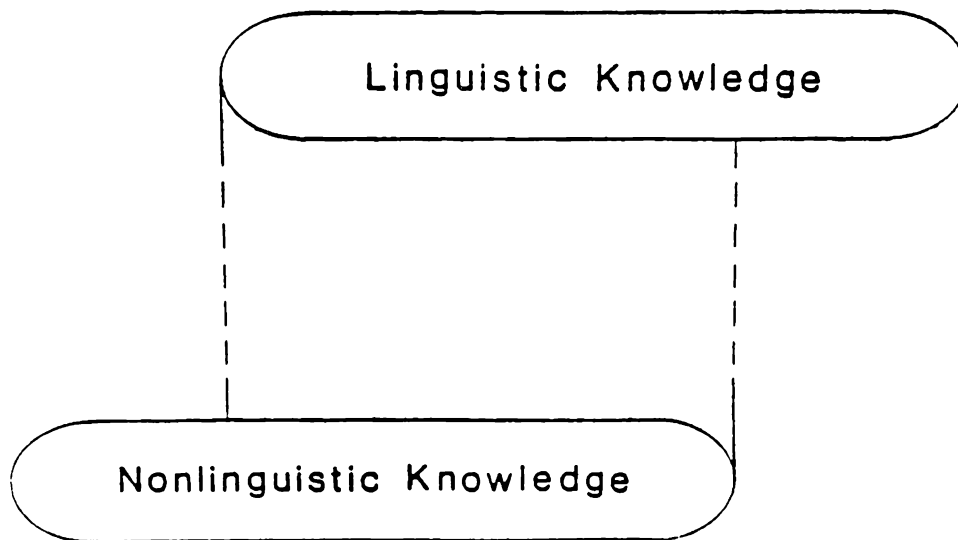


Figure 1: The mapping problem (from Rice & Kemper, 1984)

The developmental problem, then, becomes one of mapping one form of knowledge onto another. The theoretical and methodological problems become ones of describing and representing exactly how this process occurs. As Rice and Kemper (1984, p. 13) note, "the question central to much of the contemporary debate is how much of early language acquisition . . . is accounted for by cognition?"

The major contemporary theoretical accounts of the relationship between language and cognition may be characterized as the Strong Cognition Hypothesis, the Local Homologies Account, the Interaction Explanation, the Language Anchors Cognition Account, and the Weak Cognition Position.

The strong cognitive hypothesis. This hypothesis reflects Piaget's belief that language emergence is contingent upon (i.e., is a part of) more general mental representational abilities. Parallel cognitive structures precede the linguistic ones, hence cognitive development accounts for language acquisition. The strongest support for this hypothesis links linguistic achievements with prior cognitive achievements. For example, children must first learn to distinguish objects and to categorize objects with regard to appropriate actions, and actions with regard to appropriate objects.

Such cognitive accomplishments are assumed to be logically prerequisite to the use of verbs and noun phrases, and the grammatical relation of predicate and direct object. Research findings support the claim that children start with nonlinguistic meanings, and look for ways to express those meanings linguistically (Brown, 1973; Slobin, 1973). A weakness of this hypothesis is that Piagetian cognitive structures, such as object permanence, are not always acquired prior to the onset of words or word combinations (Bates, 1979). Hence, general linkages between cognition and language are not always evident.

The local homologies account. Bates (1979) and Bates, Benigni, Bretherton, Camaioni, and Volterra (1977) have proposed a "homologue model, in which both cognition and language are said to derive from a common, deeper underlying system of cognitive operations and structures that is biased toward neither (Rice & Kemper, 1984, p. 22). At different times in development the pattern of cognition and linguistic linkage is different, thus Bates concluded that homologies are localized, not global. Positive correlations are found only between specific within-stage cognitive tasks and linguistic performances; they are not found at general levels. In other words, cognition and language would be more accurately

represented each as a set of specific skills, that overlap and interrelate in skill-specific contexts (Fischer & Corrigan, 1981). For example, partial mastery of causal means-ends relations signals the onset of intentioned vocalizations and gestures (Bates, 1979). Although this account has generated a great deal of research and appears to be promising, Rice and Kemper (1984) caution that it has also generated a number of methodological and interpretive concerns.

The interaction explanation. The assumption that cognition precedes linguistic expression (i.e., a one-way direction of effects assumption) has recently been challenged by a number of scholars. An alternative proposal suggests that there is actually an early bi-directional influence between cognition and language; interaction occurs between the two. This position assumes that the acquisition of linguistic expression can and often does alter the nature of children's cognitive development. Rice and Kemper (1984, p 30) elaborate on this perspective:

There are two interpretations of interactive influences. One begins with the child's first utterances, prompted by what he wants to express (underlying meanings). His interlocutors interpret and respond both linguistically and behaviorally to these expressions. This social interaction modifies the child's nonlinguistic meanings and, ultimately, the child's linguistic expression. The other perspective considers the young child as the recipient of others' linguistic formulations. The

child becomes aware of certain equivalences (categories) encoded in language that may not have occurred to him on a nonlinguistic basis. The linguistic categories suggest new concepts or modify existing ones, thereby interacting with cognition.

Unlike the Piagetian account, this hypothesis emphasizes the social context in which the child's communication occurs, including the role of the interlocutor in the development of the child's linguistic expression and appreciation.

The language anchors cognition account. An extension of the interactionist model challenges the direction of influence of the strong cognition hypothesis. In addition, the degree of contribution of cognition to language has been questioned. These two propositions have led to the claim that language anchors cognition (i.e., language determines thought). If one accepts this claim, it follows that the cognitive development of deaf children should be structurally different from that of normal speakers. Furth (1966) conducted a series of studies designed to assess the role of language in the development of Piagetian structures among deaf children. He concluded that "language does not influence development in any direct, general, or decisive way" (Furth, 1966, p. 160), although he did note that language may have specific and direct influence by furnishing symbols appropriate for specific situations.

The weak cognition hypothesis. The preceding hypotheses, although quite different in nature, share one distinct commonality: they all acknowledge a close relationship between cognition and language. The final hypothesis, the weak cognition hypothesis, is based on two observations about language: (a) some aspects of grammar are arbitrary, not derived from or consistent with distinctions of meaning; and (b) there are different ways to say the same thing, different syntactic formulations to express the same meanings (Rice & Kemper, 1984). In other words, the focus here is not upon the association of underlying cognition and the expression of meaning in language. Rather, it is upon how children acquire grammatical conventions not based on meaning (i.e., the particulars of linguistic rules independent of meaning).

A large body of empirical research within each of the preceding domains is rapidly building. Rice and Kemper (1984, p. 37) best summarize the results of these studies as follows, "in the general sense . . . language is not necessary for cognition . . . an equally important conclusion is that, in specific cases, words and linguistic structure do exert influence on thought." What holds between language and cognition in general holds also in the study of impressions. No doubt words



that have to do with the qualities of other people appear in a child's vocabulary after that child has some nonverbal concept that requires communicating. No doubt, as well, once those linguistic concepts are available, the child is better able to distinguish cognitively among qualities that are observed in other people. What follows is a review of the literature concerning the relationship between interpersonal constructs and language development.

#### The Relation Between Interpersonal Constructs and Language Development

Although they are closely related, an interpersonal construct is not a word. As Kelly (1955, p. 9) says, constructs may be "verbally expressed or utterly inarticulate." There are some constructs which we attempt to express through the use of several or many words, none of which singly expresses the precise construct, but when used in conjunction with one another converge on its essence. Still other constructs are virtually inexpressible.

Nevertheless, research into children's constructs focuses on, and is dependent upon, those constructs which can be verbalized. Language becomes critical in the developmental process of expanding and revising the construct system. As Crockett (1982, p. 71) contends,

"the developments [of a more complex construct system] are facilitated by the simultaneous development of language." Language enables the child to share constructs with other people through discussions, or by indirect experience (books, movies, etc.). It also enables the child to reflect on her own constructs.

Two primary areas of research have emerged within research into children's constructs: one line of research has been conducted to determine the specific characteristics of child constructs, another line has focused primarily on the relation of construct development to the communication behaviors of children. The following discussion reviews research findings in both lines of investigation.

Characteristics of children's constructs. Social psychologists have documented qualitative and quantitative differences among the constructs employed by children of different ages. Peevers and Secord (1973) found that, as the age of the child increased, three distinct changes occurred. First, children shifted from employing mainly general, undifferentiated constructs to employing mainly dispositional (interpersonal) ones (e.g., "John lives in a big house" to "John is talkative"). Second, they moved from constructs that related the other person to the child, to constructs

which were independent of the child (e.g., "He gave me a cookie" to "He has blue eyes"). And third, they moved from general ascriptions about another person (which included all undifferentiated constructs) to constructs which accounted for why a person is the way she is (e.g., to "She's a snob because she's trying to hide something about herself."). Little (1968) found similar results; as the age of the child increased, the number of psychological (interpersonal) constructs used also increased, and the number of constructs used to describe physical appearance declined.

Livesley and Bromley (1973, p. 86) found that in older children, "descriptions were more complex, greater emphasis was placed on inner qualities; trait names were used with greater frequency, and relatively little reference was made to appearance and identity." These differences were quite evident between children with an age difference of 2 years, as shown in Table 1.

Scarlett, Press, and Crockett (1971) found a pattern similar to that of Livesley and Bromley; they also reported a shift from the use of egocentric constructs to nonegocentric ones (e.g., "He hit me" to "He bites people" or "He is intelligent").

Although the ages at which the developmental changes occurred vary from study to study, three patterns of

Table 1\*

Sample Descriptions Made by 9- and 11-Year-Old Children

A girl aged 7;6 describes a woman she likes:

She has long hair. She wears it in a bun, it is blond hair. She is very kind. She has two children. One is a boy and one is a girl. The boy is called Eric and the girl is called Kathleen. Kathleen wears glasses.

A boy aged 9;11 describes a boy he dislikes:

He smells very much and is very nasty. He has no sense of humor and is very dull. He is always fighting and he is cruel. He does silly things and is very stupid. He has brown hair and cruel eyes. He is sulky and 11 years old and has lots of sisters. I think he is the most horrible boy in the class. He has a croaky voice and always chews his pencil and picks his teeth and I think he is disgusting.

\*From Livesley and Bromley (1973, pp. 216-217).

construct development are evident: a shift from the use of global to the use of increasingly differentiated constructs, an increase in the total number of interpersonal constructs employed, and a change from egocentric and concrete constructs to nonegocentric and abstract, interpersonal constructs.

These research findings are consistent with the literature concerning general concept development.

Anglin (1977) summarizes those findings as follows:

Perhaps the way to think of the relation between the child's concepts and those of adults is to postulate a continuum of concepts from primitive to scientific with the former being vague, concrete, undifferentiated, and completely lacking coordination between extension and intension and with the latter being precise, abstract, differentiated, and characterized by complete coordination between extension and intension. On such a continuum the child's concepts would occupy a region closer to the primitive pole than to the scientific pole and the adult's concepts would be somewhere in the middle. (p. 264)

It should be emphasized that adults do not lose the methods of conceptualizing that are used during childhood. Rather, those methods are supplemented and refined as people mature.

Developmental changes in social perception in interpersonal communication. The work of Flavell and associates has shown that if the task is sufficiently simple, even very young children are capable of taking account of the viewpoint of others (Masangkay et al.,

1974). Shields (1978, p. 534) sums up this related research as follows:

The child. . . not only understands the idea that there is a perceptual and conceptual field which is shared, he also learns to share a world of action and interaction in which the behaviors of others must be perceived and in which others must perceive his behavior.

Delia and associates have carried out a program of research to examine how, as the construct systems of children become more complex, their ability to adapt to different characteristics in others increases. Clark and Delia (1976) examined the communication strategies adopted by children when communicating to people with different characteristics, and found that age was highly correlated with the child's ability to acknowledge and adapt to the perspectives of others. For example, children in grades two through nine were asked to pretend that they had found a lost puppy, and had gone to a neighbor's home to ask the woman who lived there to keep the puppy. Younger children tended to make a simple request ("Please keep the puppy") or one that reflected an assertion of need ("The puppy looks skinny"). Older children tended to support their requests by refuting counterarguments ("It doesn't cost much to feed a dog if you buy the big bags of food").

Delia and Clark (1977), in a study conducted with 6-, 8-, 10-, and 12-year-old boys, found that with an increase in age, there is a marked increase in a child's ability to engage in listener-adapted communication. Specifically, they discovered a developmental pattern which involved movement from little or no awareness of listener characteristics, to a stage where the older children began to adapt to specific inferred beliefs, attitudes, and qualities of the listener. Similarly, Delia, Kline, and Burleson (1979) found that with an increase in age, children begin to employ persuasive strategies associated with progressively advanced levels of social perspective-taking.

In related studies, Burleson (1980, 1982) reported that older children employed more complex and listener-centered rationales in justifying their comforting strategy choices than did younger children. In a more recent study, Burleson (1984a) found that construct abstractness (an assessment of the level of construct differentiation used) increasingly interacted with advancing age as a predictor of comforting skill.

Rosenbach, Crockett, and Wapner (1973) used a factorial design to vary subjects' age and their positive, neutral, or negative relation to another person. Subjects then received information that

described both desirable and undesirable actions taken by that person. Crockett (1982, p. 73) reports, "there was a consistent increase with age in the differentiation of subjects' impressions of that person, and also in the extent to which they were able to reconcile the ambivalent information in a comprehensive, integrated impression." Additional studies have shown that complex subjects (those with more differentiated construct systems) are able to integrate and reconcile contradictory qualities in impressions (Crockett, 1982).

These studies have established that construct differentiation increases with age, and that increased differentiation is significantly related to the communication abilities of children. Additionally, as children's construct systems become more complex, there is a marked increase in their social perspective-taking ability, and in their ability to reconcile ambivalent information.

The success of the child as communicator depends in part on the ability of the child to coordinate actions, and to predict future actions of other persons. In fact, constructs and relations among constructs develop and change because of the individual's difficulties in anticipating events effectively (Crockett, 1982). As Crockett (1982, p. 70) notes, "when unexpected outcomes



occur, people revise and extend their constructs in the interests of accounting for past events and anticipating future ones." Thus, establishing the link between constructs and actions is essential to construct development.

Crockett (1982, p. 91) has stressed that "personal construct theorists need to find a way to relate constructs to concrete aspects of the individual's experience." He goes on to suggest that one may begin by examining the patterns in other people's appearance and actions that are prototypic for particular constructs.

#### The Problem

This study was designed to explore the similarities and differences between junior high students' and college students' use of interpersonal traits (i.e., verbalized interpersonal constructs) and the relation between those traits and concrete behavior. The purpose of the study was twofold. First, it was an attempt to identify and describe general developmental trends concerning trait language usage. Second, it was an attempt to provide additional substantiation for and a developmental expansion of a portion of the impression formation model proposed by Crockett (1983).

#### Developmental differences in trait language usage.

This study was divided into two stages. The goal of the

first stage was to examine similarities and differences between junior high school students and college students in the kinds of traits they ascribe to others.

The majority of previous research concerning the characteristics of child constructs was conducted among children between 7 and 15 years of age, with the instances of child-like characteristics declining rapidly with age (Livesley & Bromley, 1973). It is reasonable to assume, however, that if developmental processes are involved in the impression formation process, then there should be significant, although somewhat less striking differences between the constructs used by junior high students and the constructs used by college students. It was expected that there would be systematic differences between the two groups in the kinds of interpersonal constructs used in impression formation. Furthermore, these differences should reflect the established developmental patterns previously discussed (i.e., movement from global to differentiated constructs, from concrete to abstract, dispositional constructs, and from egocentric to nonegocentric, interpersonal constructs).

Organization of constructs. The second goal of this study was to determine if junior high school students organized their constructs in a manner similar to that used by college students. As noted by Crockett (1982),

psychologists have proposed that sets of constructs are related to each other by a variety of organizing principles. Schank and Abelson (1977) term these organizing principles themes. Bartlett (1932) and Neisser (1976) term these principles schemata. Regardless of the terminology used, these psychologists agree that although some organizing principles are idiosyncratic, many are socially shared.

The previous section reported summarized research findings which documented that child constructs are characteristically different from adult constructs. What has not been investigated is if, and how, children schematically organize their constructs, and, if the patterns which emerge from their organizing schemes are socially shared. It was expected that junior high students would organize patterns of unlabeled actions-in-context along several underlying, socially shared organizing themes. These organizing themes will be more global and diffuse, but conceptually consistent with those used by adults.

Prototypic patterns of actions and the inference of interpersonal constructs. Another goal of the study was to test the expectation that junior high students construe and label prototypic patterns of action in a manner similar to the way college students construe and

label these patterns of action, using interpersonal trait words similar to those used by the latter. It was expected that patterns of action would elicit interpersonal trait words from junior high students that are conceptually consistent with those elicited from college students, although college students' words are expected to be more differentiated than those used by junior high students.

Confirmation of these expectations will substantiate the existence of socially shared organizing principles among junior high students, and will suggest that they are able to organize and sort constructs from actions-in-context, possibly before they can label these constructs in an adult manner. Furthermore, when asked to label these patterns of action, their labels will be conceptually consistent with those used by college students.

Summary. This study has proposed that three areas of cognitive development impact upon the impression formation process. The areas which have been examined include (1) developmental differences in trait language usage, (b) the organization of interpersonal constructs from actions-in-context, and (c) the inferences of interpersonal constructs from prototypic patterns of

action. The following hypotheses are constructed to investigate specific issues.

1. There will be systematic differences between the kinds of interpersonal constructs used in impression formation by junior high students, and the kinds used by college students, with the former's constructs more global, concrete, and egocentric.

2. Junior high students will organize patterns of unlabeled actions-in-context along several underlying, socially shared themes. The organizing themes used by them will be more global and diffuse, but conceptually consistent with those used by college students.

3. Patterns of action will elicit interpersonal trait words from junior high students which are more global and diffuse, although conceptually consistent with the more differentiated labels used by college students.

CHAPTER II  
COMPARISON OF GROUPS ON PRODUCTION DIFFERENCES  
AND QUALITY OF CONSTRUCTS

The first stage of this investigation was designed to examine Hypothesis 1, which predicted systematic differences between the kinds of interpersonal constructs used in impression formation by junior high students, and those used by college students. To do so, language samples were obtained from both groups. Two sets of analyses were conducted to provide a comparison of the number and quality of the constructs as a function of age. The two sets of analyses will be discussed separately.

Number and Representativeness of Constructs

Procedures. The goal of this section was to obtain a representative set of constructs from older children and young adults to compare their quantity. Two groups of subjects participated in the study. One group consisted of 45 undergraduates, all middle- to working-class students, from small cities or towns and mostly white, enrolled in a Speech Communication course at the University of Kansas. The second group consisted of 26 children, aged 12 and 13, from the seventh grade of Baldwin Junior High School, Baldwin City, Kansas, with backgrounds similar to those of the college students.

The instrument used to elicit constructs was the Role Category Questionnaire (Crockett, 1965). This questionnaire asks respondents to record, in writing, the characteristics of four of their peers (two male and two female, two liked and two disliked). The questionnaire was administered in groups of 8 to 13. Subjects were asked to write descriptions about people with whom they were acquainted, so that the investigator would know from their descriptions what kind of people these were. Instructions for the Role Category Questionnaire were modified somewhat to account for vocabulary and comprehension differences for use with the junior high students. The general instructions for adults and children can be found in Appendix A. Subjects were allowed 10 minutes to describe each person. The number of constructs in each subject's protocol was determined by two different judges. The correlation between their scoring was .91 ( $p < .001$ ).

Results. College students scores ranged from 21 to 70,  $M = 42.24$ . Junior high student scores ranged from 13 to 69,  $M = 35.61$ . The two groups differed significantly in number of total constructs given ( $t = 2.01, p < .05$ ).

To ascertain that these constructs were similar to those obtained by other researchers, all constructs which

described interpersonal qualities of the acquaintances were identified and a list of constructs was compiled for each age group. Constructs were retained on this list only if two or more subjects employed them, in order to eliminate totally idiosyncratic items. In addition, a few constructs for which there is no generally agreed upon definition (e.g., "He's the baddest dude") were disregarded. For each group, the constructs were then listed in descending order, from those appearing most frequently to those appearing least frequently, and were divided into quartiles on the basis of the number of subjects who mentioned them.

Each construct was then scored according to its frequency on two different estimates of word usage. One of these was the Francis and Kucera (1982) frequency analysis of English usage. This volume contains a lexical and grammatical analysis of a one-million-word corpus of present day American English, including a frequency list of the words. Each word has been grammatically tagged (i.e., given a specific grammatical designation), and has been assigned a numerical value to designate its frequency of occurrence.

The second estimate of word frequency was a trait list compiled in a study of Livesley and Bromley (1973). Using a procedure similar to the Role Category



Questionnaire, these researchers solicited constructs from 320 school children ranging in age from 7 to 15. A trait list was compiled which only included traits used by more than 1% of the sample (four or more children). Each trait was listed along with a corresponding numerical value which indicated the percentage of children who used that particular trait.

All of the constructs were then scored according to their frequency on both the Francis and Kucera corpus and the Livesley and Bromley trait list. Constructs that did not appear in one source or another were assigned a value of zero for that list. The mean scores were then computed for constructs in each quartile of each group's distributions.

As shown in Table 2, the most frequently used constructs by both groups in the present study also had high frequency scores on the Francis and Kucera list. Frequency scores decreased consistently from the most commonly used constructs to the least commonly used. Furthermore, the mean frequency ratings for constructs in the first and second quartiles were remarkably similar for college students and junior high students.

Table 3 shows that ratings on the Livesley and Bromley also diminished consistently as the popularity of the construct declined. However, the top fourth of the

Table 2

Frequency Ratings on Francis and Kucera's Norms of  
College Students' and Junior High Students' Constructs

Quartile	Frequency Ratings	
	College Students	Junior High Students
1	31.53	31.39
2	25.50	26.44
3	15.55	13.83
4	3.76	9.88

Table 3

Frequency Ratings on Livesley and Bromley's Norms of  
College Students' and Junior High Students' Constructs

Quartile	Frequency Ratings	
	College Students	Junior High Students
1	7.31	14.61
2	2.71	3.32
3	2.49	3.19
4	1.48	.48

college students' constructs had a much lower rating than for the junior high students' constructs. No doubt this reflects age differences in the kinds of constructs employed.

#### The Quality of Constructs

Procedures. The goal of this section was to analyze qualitative differences between constructs from the two subsamples. The first major hypothesis predicted that college students would generate more abstract, and less egocentric constructs than junior high students. However, as was just shown, there was a significant difference between the mean number of constructs generated by college students and the mean number generated by junior high students. It was necessary to control for this difference when comparing the quality of the constructs employed by the two groups. Therefore, 26 college student responses were chosen whose total number of constructs on the Role Category Questionnaire matched those of the junior high students. This resulted in two groups of 26 subjects each. The mean number of constructs in the older group was 35.76; that in the younger group was 35.61.

The Role Category Questionnaire for each of these subjects was scored again by assigning each construct to one of four categories described below. These categories

were originally used to examine construct differences among children (Scarlett, Press, & Crockett, 1971). The four categories were as follows:

Concrete-we constructs - constructs in which the subject did not distinguish between characteristics of himself and those of the target individual, but described activities engaged in by both (e.g., "we study together").

Egocentric-concrete constructs - constructs which described concrete behaviors of the target individual in particular contexts, and in which the object of the behavior was the subject (e.g., "she lets me borrow her clothes").

Nonegocentric-concrete constructs - constructs which described concrete behaviors of the target individual, but which did not include the subject (e.g., "he is a math major").

Abstract constructs - constructs which were abstract qualities and not limited to a specific context (e.g., "he is thoughtful").

To check on the reliability of scoring, each response was scored independently by two coders, who determined the total number of the four construct types used by each subject. Correlations between the coders' scores were obtained for each category. The two coders showed exact agreement on the first category, concrete-we constructs.

For the three remaining categories, the average correlation was +.95 (with the lowest correlation at +.93); in all cases  $p < .01$ .

These scores were then analyzed in a 2 x 4 analysis of variance. The variables were age of subject (older vs. younger) and type of construct, with repeated measures on the last variable. The results of the analysis of variance are shown in Table 4. Clearly, no main effect could occur for age of subject, since at the outset total number of constructs had been matched. Subjects did differ significantly as a function of construct type,  $F(3, 150) = 237, p < .001$ . More importantly, there was a significant interaction between construct type and age,  $F(3, 150) = 21.9, p < .001$ . Although total number of constructs were relatively equal, the proportion of higher-order constructs in these descriptions increased with age, as shown in Table 5.

It should be noted that relatively few egocentric-we constructs were used in both groups, and that relatively many abstract constructs were used. More importantly, the older subjects consistently produced more abstract constructs and fewer concrete constructs than did the younger subjects.

Even though college students employed more abstract constructs than did junior high students, both groups

Table 4  
 Summary of Analysis of Variance on Scores for  
 Type of Construct by Subjects' Age

Source	ss	df	ms	F	p
Total	30908	207	--	--	--
Between Subject	2103	51	--	--	--
Age	0	1	--	--	--
Error <sub>b</sub>	2103	50	42	--	--
Within Subjects	28805	156	--	--	--
Construct Type	22065	3	7355	237	< .001
Construct Type x Age	2039	3	680	21.9	< .001
Error <sub>w</sub>	4701	150	31	--	

Table 5

Mean Number of Constructs in Each Category by Each Age Group

Age of Subject	Concrete-we	Egocentric-concrete	Nonegocentric-concrete	Abstract
Jr. High Students	.50	4.00	10.77	20.34
College Students	.19	.65	2.42	32.50
Overall Total	.35	2.33	6.59	26.42

employed a considerable number of global constructs. But they used these constructs quite differently. College students did not use such constructs as sufficient descriptions in and of themselves, but combined them with more precise descriptions. Junior high students, by contrast, often used global constructs as complete descriptions, without elaboration or specification.

For example, the word most frequently used by both groups to describe a person was the word "nice". But whereas older subjects elaborated "nice" with more differentiated constructs, the younger ones did not, but commonly produced concrete behavioral constructs to further describe the individual. Representative examples are as follows:

College Student

Chris is a really nice person. She's understanding, caring, and loving. She will do anything to be helpful. She's trustworthy and down to earth. Once in a while she gets moody, but not very often. She has a good sense of humor, always full of laughs. She gets along with everyone and is very kindhearted.

Junior High Student

She's a very nice person she likes Duran Duran a lot to. She likes boys and talks about them. She sits next to me and is always on time to class.

These findings are consistent with Anglin's (1977) theory of concept development, which proposes that adults do not lose or replace global concepts, but rather supplement



and refine them. The results reported above show that there are consistent production differences between the two groups, in both number and quality of constructs, and thus Hypothesis 1 was supported.

CHAPTER III  
COMPARISON OF GROUPS ON CONSTRUCTS  
INFERRED FROM ANECDOTES

The results reported in Chapter II showed that there were consistent differences between age groups in the number and kind of constructs they produced. Perceivers in general, however, do not actually observe these constructs. What they do observe is the way other individuals act in specific situations (i.e., actions-in-context). From those observations, inferences are made, and impressions are communicated through the use of interpersonal constructs. As Crockett and Thom (1983, p. 15) posited, "the inference of interpersonal constructs from behavior is mediated by the pattern of concrete events that a perceiver has registered about the behavior of another person." In other words, there are identifiable patterns of action which are prototypic for the attribution of particular interpersonal constructs, and which evoke that construct quickly and consistently. In a recent investigation, it has been found that in proportions far in excess of chance, subjects showed consensus on the inference of many constructs from their prototypic representations (Crockett & Thom, 1983).

Adults, then, discriminate among prototypic behavioral patterns of action and often assign the same labels to communicate the impressions they form from such patterns. The next question was whether junior high students would make the same kinds of discriminations among prototypic behaviors that adults make, even though they would not use the adult labels to identify those behaviors. A related question asks whether there are socially shared, underlying organizing principles used by young teenagers to categorize their constructs which are similar to those used by adults, albeit more global and diffuse. The following hypothesis was developed in regard to these questions:

#### Hypothesis 2

Junior high students will organize patterns of unlabeled actions-in-context along several underlying, socially shared themes. The organizing themes used by junior high students will be more global and diffuse, but conceptually consistent with those used by adults.

To test this hypothesis, materials and procedures had to be developed which would indicate the individual's ability to discriminate among and categorize behaviors but would not require the use of vocabulary to label constructs. The present chapter describes how these materials were developed. It will first describe the selection of a subset of constructs and the development

of anecdotes describing situations that were intended to be prototypic for constructs. There will then follow a qualitative analysis of the extent to which the anecdotes did, in fact, elicit the intended constructs.

#### Selection of Constructs and Development of Anecdotes

Clearly, it would have been too extensive a task to develop prototypic anecdotes for each of the 130 constructs. As a way of reducing the number of such anecdotes, a way was sought to group constructs in general categories, here called "themes," and to select a fixed number of constructs from each category for the writing of anecdotes.

Identification of themes and assignment of constructs to themes. To identify socially shared themes used by individuals to categorize constructs, a list of constructs used only by college students was compiled from the Role Category Questionnaires. A total of 130 constructs were included in the list, and may be found in Appendix B. Copies were distributed to six graduate students in the Child Language Program at the University of Kansas. The students were asked to categorize these constructs in any manner they saw fit, using as many categories as necessary. Previous research has shown that subjects tend to view construct labels along a bi-polar, social good/social bad factor. To

discount this tendency, students were asked to disregard the "good/bad" nature of the words. The complete instructions given to the students were as follows:

This is a list of words we commonly use to describe other individuals. Please put these words into categories, using any manner which you deem fit. Do not think of these words as describing behaviors which are "good" or "bad." Think of them as describing behaviors which are similar, or not similar. Use as many categories as necessary.

Each student completed the categorization process privately, without discussing it with other participating or nonparticipating individuals. They were asked to return their responses within three days.

The number of categories generated by the students ranged from 6 to 14, with a mean of 9. The categories from each of these judges were listed, then compared and collapsed where appropriate. For instance, although the labels for the category and the total number of words included varied, all students generated a category related to emotional expressiveness (variously termed "temperament," "emotion," "affect," "self-worth," and "personality" by different judges). Therefore, a category labeled "emotional expressiveness" was created, and words were chosen to represent that category on which at least four judges agreed. The same process was repeated until what appeared to be six socially shared themes emerged: conceit-modesty, responsibility,

intellectual ability, friendliness, regardfulness, and emotional expressiveness. These themes and the constructs they subsume are listed in Table 6.

To check on the validity of these categories, a second list of 68 words was compiled, consisting of those which (a) fell in one of the six themes described above, and (b) appeared in descriptions by children as well as those by adults. Another set of graduate students were provided with the six category labels and were asked to place each construct under the category heading they thought was most appropriate for describing that construct (see Appendix C). Again, judges were asked to work individually. Asterisks behind the constructs in Table 6 indicate those for which there was unanimous agreement among judges. The high consensual agreement among the judges indicates that the themes sort the constructs into distinct sets.

Construction of anecdotes. The next phase in the development of materials involved the construction of anecdotes which described prototypical patterns of behavior for particular constructs. A variety of constructs from each category were chosen based on the following criteria: (a) Each construct was unanimously assigned to the same theme by the judges, and (b) each construct was judged by the experimenter to describe

Table 6

Initial Themes and Constructs

<u>Conceit-Modesty</u>	<u>Regardfulness</u>	<u>Friendliness</u>
* 1. Conceited	* 1. Shares	* 1. Popular
* 2. Egotistical	* 2. Generous	* 2. Easy to talk to
* 3. Arrogant	* 3. Cares about others	* 3. Sociable
* 4. Cocky	* 4. Helps others	* 4. Sarcastic
* 5. Stuck-up	5. Forgiving	5. Fun
* 6. Shy	* 6. Thoughtful	* 6. Many friends
* 7. Snob	7. Compassionate	* 7. Doesn't have
* 8. Brags	8. Kindhearted	8. Good friend
9. Has to be the best	* 9. Understanding	* 9. Friendly
*10. Not snobbish	*10. Considerate	*10. Easy to get along with
*11. Snotty	*11. Greedy	*11. Good conversationalist
*12. Wants compliments	*12. Selfish	*12. Outgoing
*13. Self-centered	*13. Easy-going	
	*14. Makes fun of others	
	*15. Sympathetic	
<u>Emotional Expressiveness</u>	<u>Intellectual Ability</u>	<u>Responsibility</u>
* 1. Cries	* 1. Good student	1. Cheats
* 2. Mad	* 2. Talented	* 2. Lazy
* 3. Bad temper	* 3. Intelligent	* 3. Hardworker
* 4. Warm	* 4. Not Intelligent	* 4. Reliable
* 5. Angry	* 5. Ignorant	* 5. Breaks Rules
* 6. Moody	* 6. Smart	* 6. Responsible
7. Cheerful	* 7. Not smart	* 7. Trustworthy
* 8. Calm	8. Acts stupid	8. Lies
* 9. Happy	* 9. Creative	
10. Always in a good mood		
11. Sensitive		

qualities distinct from the others (e.g., both "cheats" and "breaks rules" would not have been chosen).

Six constructs were chosen from each of the six categories. For each of the 36 constructs a prototypic pattern of relations was developed. This was accomplished by capitalizing on the results of Crockett and Thom (1983), by consulting dictionary definitions, and by relying on intuitive judgments about the patterns of relations appropriate to the construct. Once the prototypic patterns of relations were specified, two anecdotes were written for each construct. Each anecdote included a focal person, a set of activities and objects within a given context, and sometimes one or more other persons. Only objective behavior was described; no trait-like adjective appeared in any of the anecdotes.

For several of these 36 constructs this task proved impossible. For instance, it seemed not to be possible to describe behaviors for "easy to talk to" without including a synonym or antonym for "easy," and a reference to speech. Those constructs for which no objective behavior could capture their essence without violating the above stated criteria were eliminated. This reduced the initial list of 36 constructs to 26, as indicated in Table 7.



Table 7  
Final Themes and Constructs

Conceit-Modesty

1. Unsociable
2. Shy
3. Conceited
4. Modest
5. Arrogant

Regardfulness

1. Thoughtful
2. Sympathetic
3. Not helpful
4. Selfish
5. Generous

Friendlessness

1. Popular
2. Friendly
3. Unsociable
4. Hard to Get Along With

Emotional Expressiveness

1. Bad temper
2. Calm
3. Happy
4. Moody

Intellectual Ability

1. Untalented
2. Intelligent
3. Creative
4. Unintelligent

Responsibility

1. Unreliable
2. Cheats
3. Responsible
4. Hardworking

## Assessing the Relation Between Constructs and Anecdotes

Subjects' ratings. To determine whether the anecdotes actually led subjects to infer the intended construct, groups of subjects were asked to read each anecdote and to indicate which one quality of a person they could best infer from that anecdote.

Anecdotes were assembled, one per page, in booklets, with each booklet containing one presumably prototypic anecdote for each of the 26 constructs. Thus, the two anecdotes relevant to a given construct were judged by different sets of 15 subjects. Ratings were made by undergraduate students in Speech Communication classes at the University of Kansas.

To carry out those ratings, a set of 52 constructs were assembled, including the critical 26 plus another 26 distractors. Subjects read each anecdote, in turn, and chose from the 52-item list their first and second choices of words that best described the anecdote.

Qualitative analysis of responses. There was substantial agreement among anecdotes in the extent to which they elicited the intended construct. The nature of these relationships will be described by considering, first, those for which consensus was greatest and proceeding to those for which consensus was least. In each category, the pattern of behavior that presumably

characterized the construct will be described, followed by the two anecdotes and the constructs they elicited.

Of the 26 constructs, the anecdotes for 17 elicited the intended constructs from 80% or more of the subjects. These will be described by first listing, for each construct, the nature of the contexts to which it is applicable and the proposed prototypic pattern for the construct. This will be followed by the two anecdotes that were written for that construct, the percent of subjects who assigned the construct to each anecdote, and the other constructs (if any) that were elicited by the anecdote. Finally, because each construct is paired with an antonym, the hypothetical prototypic pattern for the antonym will be given, though no anecdotes were written and tested for the antonymic patterns, with the exception of "intelligent."

#### 1. Unsociable

Context: Describes P's behavior in a social situation, where interaction is seen as the desired behavior

Hypothetical prototypic pattern: P does not desire interaction; interacts with few, if any; evidences desire for escape

#### Anecdotes

- A. Milt would rather stay at home and watch television than go out with a group of people. When he does go out he keeps to himself.

% choosing Unsociable: 100

B. Jerry had a big party for his birthday. I was having a lot of fun, but I noticed that Donna was sitting by herself. I went over and asked her if anything was wrong. She said, "I hate parties. I'd rather be at home by myself where no one would bother me, and I wouldn't have to talk to anybody. I had to come tonight because Jerry is my cousin."

% choosing Unsociable: 87

Other constructs chosen: Shy (2)

Antonym: Sociable

Hypothetical prototypic pattern: P desires interaction; interacts with many; evidences no desire for escape

## 2. Creative

Context: P is in a situation where there is an opportunity to generate and implement new ideas

Hypothetical prototypic pattern: P generates new ideas with ease; P determines how to implement the ideas; success

### Anecdotes

A. Barbara likes to think up new games. She has come up with many different kinds of games that both children and adults can play.

% choosing Creative: 100

B. We came up with a great idea for our homecoming float, but we couldn't figure out how to build it. Rich came by to see how we were doing. He came up with lots of good ideas and figured out how to make them work.

% choosing Creative: 100

Antonym: Not Creative

Hypothetical prototypic pattern: P has difficulty with generating new ideas; ideas which are generated cannot be implemented; failure

### 3. Conceited

Context: P is a group member (defined either idiosyncratically or socially); P disvalues non-group members; P has the opportunity to interact with O, a non-group member

Hypothetical prototypic pattern: P identifies with a group; P confines interactions to the group; outcome is a narrow range of interaction

#### Anecdotes

A. Jean only talks to people who are as successful as she. She ignores everyone else.

% choosing Conceited: 100

B. Ever since Adam got the lead in the school play, he never talks to his friends who didn't get a part in the play, except to tell them what a great actor he is.

% choosing Conceited: 100

Antonym: Not Conceited

Hypothetical prototypic pattern: P is a recognized member of a group; P interacts with non-group members; outcome is a broad range of interactions

### 4. Popular

Context: P is in a situation where the majority has the opportunity to seek out P

Hypothetical prototypic pattern: P is highly visible; P is sought by majority; majority highly regards P

## Anecdotes

A. Everyone in school knows Mary. She is always the first to be asked to join clubs, to attend parties, and to organize after school activities.

% choosing Popular: 100

B. In just one year, Kevin was voted senior class president, newspaper editor, and captain of the football team. No one else got as many votes as he did for any of those things.

% choosing Popular: 93

Other constructs chosen: Intelligent (1)

Antonym: Not Popular

Hypothetical prototypic pattern: P is not highly visible; avoided by majority; not highly regarded

## 5. Selfish

Context: P possesses object that O desires; if P were to relinquish object P losses would not be substantial

Hypothetical prototypic pattern: P possesses object; O requests object; P's effort and cost to relinquish object would be less than average; P denies request

## Anecdotes

A. Carl was carrying a huge bag of candy. I asked if I could have a piece. He told me to get my own candy.

% choosing Selfish: 100

B. I needed a set of special pencils to complete an art project, but I didn't have the money to buy them. I knew that Sally had two sets, so I asked her if I could borrow one. She told me to go buy a set.

% choosing Selfish: 87

Other constructs chosen: Not Helpful (1)  
Assertive (1)

Antonym: Not Selfish

Hypothetical prototypic pattern: P possesses object;  
O requests object; P's effort and cost to  
relinquish object would be greater than  
average; P grants request

6. Friendly

Context: P has the opportunity to interact with O,  
particularly when P does not know O well

Hypothetical prototypic pattern: P's interaction  
efforts are high; P's range of interactions  
are broad; interactions are consistently  
positive

Anecdotes

A. Every time I see Joe he is always  
talking and laughing with someone. He  
makes it a point to meet new people, and  
even though I don't know him well he  
always says hi when he sees me.

% choosing Friendly: 93

Other constructs chosen: Happy (1)

B. Susan is always talking and laughing  
with someone. She always says hi to  
people she knows well and even to people  
she doesn't.

% choosing Friendly: 80

Other constructs chosen: Conceited (1)  
Adventurous (2)

Antonym: Not Friendly

Hypothetical prototypic pattern: P's interaction efforts are low or nonexistent; range of interactions is narrow; interactions are consistently negative or inconsistent.

## 7. Unreliable

Context: P commits to or promises to execute some action; O or group will be negatively affected if P does not follow through

Hypothetical prototypic pattern: P commits or promises; no follow-through; occurrence is greater than average

### Anecdotes

A. I watch my brother every day for two hours after school. I wanted to go to the library after school on Tuesday and Phillip said that he would be happy to watch my brother. He never showed up. When I asked him about it, he said that he had just forgotten, and that he would be there on Thursday. He didn't show up again.

% choosing Unreliable: 100

B. Although Karen promised to help with the bake sale, she showed up an hour late and didn't bring anything to sell. The same thing happened two weeks ago.

% choosing Unreliable: 93

Other constructs chosen: Insincere (1)

Antonym: Reliable

Hypothetical prototypic response: P commits or promises; follows through; occurrence is greater than average

## 8. Responsible

Context: P assumes a task which carries with it a set of expectations; O or group will be negatively affected if P does not meet those expectations



Hypothetical prototypic pattern: P assumes task,  
meets expectations; success

Anecdotes

A. Jack asked if he could borrow my new bicycle for a race that he wanted to enter. I said yes. He took very good care of it and returned it as soon as the race was over.

% choosing Responsible: 93

Other constructs chosen: Serious (1)

B. Lily got a job at the Kwik Shop two months ago. She has been on time for work every day. When her boss counts the cash drawer each night, it always has the correct amount of money in it.

% choosing Responsible: 87

Other constructs chosen: Cautious (1)  
Anxious (1)

Antonym: Irresponsible

Hypothetical prototypic pattern: P assumes task;  
expectations are not met for no apparent  
legitimate reason; failure

9. Not Helpful

Context: P is in a position to offer assistance to  
O, without significant cost to P

Hypothetical prototypic pattern: P could but chooses  
not to recognize O's plight; no assistance  
is offered

Anecdotes

A. Caroline stopped by just as I was beginning to move a large number of books up to my bedroom. She didn't offer to carry any of them up, but sat in the living room while I made several trips up and down the stairs.

% choosing Not Helpful: 100

B. I was trying to fix the wheel on my bike. I just couldn't figure out how to do it. Bill was passing by and stopped to say hello. I knew he had fixed a lot of wheels before, but he didn't stay around to give me a hand.

% choosing Not Helpful: 87

Other constructs chosen: Moody (1)  
Modest (1)

Antonym: Helpful

Hypothetical prototypic pattern: P recognizes O's plight; assistance is offered

#### 10. Hardworking

Context: P performs a set of behaviors designed to accomplish short- or long-term goals

Hypothetical prototypic pattern: P accepts task; self-directed; performance time is greater than average; much is accomplished

Anecdotes

A. Darlene wants to be a professional ice skater. She practices about five hours every day, even on weekends. I've never heard her complain about it.

% choosing Hardworking: 87

Other constructs chosen: Calm (1)  
Responsible (1)

B. Our club had a carwash to raise money. Half of our members were to wash cars in the morning, and the other half would wash cars in the afternoon. Chris washed cars all morning, and he volunteered to stay all afternoon. He kept up with everyone else and didn't complain once.

% choosing Hardworking: 80

Other constructs chosen: Reliable (2)

Modest (1)

Antonym: Not Hardworking

Hypothetical prototypic pattern: P rejects task;  
performance time is less than average;  
coercion is necessary; little is  
accomplished

#### 11. Bad Temper

Context: P receives criticism or P's expectations  
are not met

Hypothetical prototypic pattern: P has an emotional  
outburst; outcome is negative actions  
and/or remarks; behavior is seen as  
inappropriate

Anecdotes

A. Last week Sue made dinner for her  
family. Her brother said that he  
thought the potatoes were a little too  
salty. Sue picked up his plate and  
threw it out of the window.

% choosing Bad Temper: 100

B. If things don't go Tom's way, even  
little things, he gets red in the face  
and sometimes breaks the first thing he  
gets his hands on.

% choosing Bad Temper: 93

Other constructs chosen: Moody (1)

Antonym: Good Temper

Hypothetical prototypic pattern: P has no emotional  
outburst; positive actions or remarks;  
behavior is seen as appropriate

#### 12. Happy

Context: P has the opportunity to interact with O

Hypothetical prototypic pattern: P exhibits nonverbals; P's positive remarks concerning self

#### Anecdotes

A. I saw Danny today and asked him how he was. He smiled and said "Great. School is going well, Mom's health is better, and I finally found a part-time job."

% choosing Happy: 80

Other constructs chosen: Hardworking (2)  
Reliable (2)

B. I saw Patty three times last week. Each time she had a big smile on her face and said that she was doing really well.

% choosing Happy: 80

Other constructs chosen: Calm (1)  
Cautious (1)  
Conceited (1)

### 13. Moody

Context: P is in the process of interacting with O or group

Hypothetical prototypic pattern: P's emotions fluctuate rapidly and are inconsistent with the situation

#### Anecdotes

A. One day Paul and I were working on the school newspaper. He had this funny idea and he and I were laughing about it. All of a sudden he said, "Well, if you want to laugh about it and don't want to work then I'll just leave." He stormed out of the room, but came back 15 minutes later as if nothing ever happened.

% choosing Moody: 87

Other constructs chosen: Hardworking (1)  
Dependent (1)

B. We were shopping downtown with Annette who was acting very funny and making us laugh. All at once she stopped saying anything and would hardly answer us when we talked to her. Then about 20 minutes later she was acting funny and laughing again.

% choosing Moody: 80

Other constructs chosen: Annoying (2)  
Selfish (1)

Antonym: Not Moody

Hypothetical prototypic pattern: P's emotions are stable and consistent with the situation

#### 14. Shy

Context: P must interact with new people

Hypothetical prototypic pattern: P avoids new interactions; physical discomfort is evident

Anecdote

A. My friend Harry trembled when he had to meet strangers. He would blush and stammer and wouldn't be able to think of anything to say to anybody until he had gotten to know them pretty well.

% choosing Shy: 100

B. Patty doesn't go to parties unless she knows a lot of people who are going to be there. She starts to shake when she has to meet new people.

% choosing Shy: 93

Other constructs chosen: Anxious (1)

Antonym: Not Shy

Hypothetical prototypic pattern: P seeks new interactions; no physical discomfort is evident

#### 15. Intelligent

Context: P must complete an intellectual task

Hypothetical prototypic pattern: P's effort is low, task is moderately to very difficult

##### Anecdotes

A. The teacher gave us a very hard test. Ellen finished the test long before the rest of us, and, as usual, all of her answers were correct.

% choosing Intelligent: 100

B. The model train set I bought came with a very complicated set of instructions. Even my older brother couldn't figure them out. Matt stopped by one afternoon. I told him about the train set. He asked to see the directions, and after reading them only once, he had the train set together in about a half hour.

% choosing Intelligent: 93

Other constructs chosen: Creative (1)

#### 16. Unintelligent

Context: P must complete an intellectual task

Hypothetical prototypic pattern: P's effort is high; task is not difficult; failure

##### Anecdotes

A. The teacher gave the class a very easy assignment. Although Ron worked very hard, it took him almost the entire class period to complete. He got most of the answers wrong.

% choosing Unintelligent: 93

Other constructs chosen: Hardworking (1)

- B. My friends and I were playing a very simple card game called "Go fish." Sadie came by and asked if I would show her how to play. I explained the two rules to her several times, but she just couldn't get the hang of it.

% choosing Unintelligent: 93

Other constructs chosen: Considerate (1)

Two other constructs were chosen by 80% or more of the subjects for one of their anecdotes. The hypothetical patterns for these will be given, as above, followed by the anecdotes and the antonyms. A brief explanations will then be attempted for the poor success of the second anecdote.

#### 17. Modest

Context: P achieves more than average; O recognizes P's achievement

Hypothetical prototypic pattern: P accepts recognition; discusses achievement less than average; concern is for group; changes subject fairly quickly

#### Anecdotes

- A. While a group of us were sitting around talking, someone brought up the subject of grades. Joel stayed out of the conversation until someone asked how he was doing. He said that he had a straight A average, but he wasn't sure it meant as much as people think. He then started talking about something else.

% choosing Modest: 93

Other constructs chosen: Intelligent (1)

B. Dave took first place in a national music contest. When he returned we all congratulated him. He smiled and thanked us, but he made it a point to say that he would never have gotten that far without the help he had from a lot of other people. Then he turned the conversation away from himself to talk about other people in the group.

% choosing Modest: 67

Other constructs chosen: Polite (3)  
Courteous (2)

Antonym: Not Modest

Hypothetical prototypic pattern: P seeks recognition; discusses it more than average; concern is for self; continues to dwell on subject

The prototypical pattern for modest involved little concern, on P's part, for a justified personal achievement. The "Dave" anecdote, however, also contained a "thanking" behavior and recognition of others. These behaviors exemplify common social etiquette, it is not surprising that this anecdote also evoked polite and courteous. The "Joel" anecdote contained neither and was successful.

#### 18. Generous

Context: P recognizes O's or group's need

Hypothetical prototypic pattern: P contributes more than expected; cost to P may be significant



## Anecdotes

A. My friend's Uncle Wil gave a large donation to the school to help pay for the new band uniforms.

% choosing Generous: 100

B. Bob gave all of the money he earned last summer to the local orphanage.

% choosing Generous: 60

Antonym: Not Generous

Hypothetical prototypic pattern: P contributes less than expected; cost to P was insignificant

The prototypic pattern for generous was based on an act of abundant sharing. It was successful in the "Wil" anecdote, which involved a large donation to a school for the purpose of purchasing new band uniforms. The "Bob" anecdote probably was not successful for the following reasons. First, it failed to provide a sense of the size of the donation; the prototypical pattern called for an act of abundant sharing. Second, the context of the anecdote specifically involved a charitable contribution; presumably subjects viewed this behavior as an act of altruism and hence the anecdote evoked constructs such as considerate, thoughtful, and unselfish.

Six constructs were inferred from their anecdotes by at least half of the subjects.

## 19. Untalented

Context: P must perform a skill

Hypothetical prototypic pattern: P contributes high effort; executes skill; fails

Anecdotes

A. Mike wanted to be in the chorus. In order to try out for it he had to sing a solo. Although he had been practicing for weeks, almost every note he sang was off key.

% choosing Untalented: 67

Other constructs chosen: Unfortunate (1)  
Unlucky (1)  
Loser (1)

B. Katie was practicing to become an artist. At the art festival she showed some of her drawings to professional artists. They all suggested that she choose some other career.

% choosing Untalented: 73

Other constructs chosen: Amateur (2)  
Unskilled (2)  
Loser (1)

Antonym: Talented

Hypothetical prototypic pattern: P excels at a skill; recognition is received for achievement

It appears that the prototypical pattern of behavior for untalented may be more accurately depicted through repeated attempts at success and their subsequent failures, with relatively no chance for improvement, rather than by a single isolated incidence of failure. Constructs such as amateur, unfortunate, unskilled, and unlucky indicate that subjects view the behavior as one

which can, in time, be improved, or as uncharacteristic of P.

## 20. Hard To Get Along With

Context: P repeatedly has the opportunity to interact with O or group

Hypothetical prototypic pattern: P has several opportunities to interact with O or group; consistent disagreement; P repeatedly ends up alone

### Anecdotes

A. Our class was divided into five groups to work on a project. Judy was in our group. She disagreed with everything we said so she moved to another group. We noticed that she soon left that group and moved to another group, and to another group, until pretty soon there weren't any groups left for her to work with.

% choosing Hard To Get Along With: 53

Other constructs chosen: Self-Centered (3)  
Egotistical (3)  
Arrogant (1)

B. When people try to talk to Jim, he usually disagrees with what they are saying or tries to point out why they are wrong. He is almost always by himself.

% choosing Hard To Get Along With: (60)

Other constructs chosen: Egotistical (4)  
Arrogant (4)

Antonym: Easy To Get Along With

Hypothetical prototypic pattern: P interacts with others often; disagreements have positive outcomes but are not the norm

Because of its apparent relation to the following construct, hard to get along with will be discussed in conjunction with arrogant.

## 21. Arrogant

Context: P is expected to follow social norms

Hypothetical prototypic pattern: P violates social norm; P does not have legitimate reason for violation; P exhibits an exaggerated sense of self-worth

### Anecdotes

A. This afternoon I was talking to a friend. Sharon came up and interrupted us without even saying "excuse me." She had done the same thing to me this morning.

% choosing Arrogant: 73

Other constructs chosen: Self-centered (2)  
Rude (2)

B. There was a long line at the grocery store. Cindy cut in front of everyone without explaining why.

% choosing Arrogant: 67

Other constructs chosen: Rude (3)  
Egotistical (1)  
Self-Centered (1)

Antonym: Not Arrogant

Hypothetical prototypic pattern: P stays within the boundaries of social norms; when given the opportunity P does not exhibit an inflated sense of self-worth

It appears that for these two constructs, the corresponding prototypical patterns share many common

elements; anecdotes which represent one pattern are likely to produce the inference of the other. Although further refinement of the prototypes and anecdotes may result in the inference of the intended construct, it is possible that concrete representations of some pairs or combinations of these constructs are so similar that people cannot conceive of a person who possesses one quality and not the other. The following two constructs may have a similar relation.

## 22. Thoughtful

Context: P is in a position to do something for O that O will presumably appreciate

Hypothetical prototypic pattern: P observes O's need; P performs a task, unsolicited, which assists O

### Anecdotes

A. When I was sick and couldn't leave the house, Roger called every day to see if I needed anything. A couple of times he stopped by to visit me, too.

% choosing Thoughtful: 73

Other constructs chosen: Helpful (3)  
Considerate (1)

B. My family was just starting to move into our new house. We hadn't been there more than a few hours when Betty, one of our new neighbors, brought us some fried chicken so that we wouldn't have to cook.

% choosing Thoughtful: 73

Other constructs chosen: Helpful (2)  
Considerate (2)

Antonym: Not Thoughtful

Hypothetical prototypic pattern: P obviously has the opportunity to do a good deed for O; little if any cost to P; P does nothing

### 23. Sympathetic

Context: P witnesses O in an uncomfortable situation

Hypothetical prototypic pattern: P witnesses O in a particular situation; the situation contains uncomfortable or painful elements common to human experience; P eases the situation for O

#### Anecdotes

A. Mrs. Johnson told her grade school class that they could build their own kites. No one but Mrs. Johnson noticed that one student didn't seem to know what to do. Instead of calling attention to the student, Mrs. Johnson told the class to stop what they were doing. She suggested that first they should talk about the best way to build a kite.

% choosing Sympathetic: 67

Other constructs chosen: Helpful (3)  
Considerate (2)

B. Frank found out that one of John's relatives had been caught stealing money. Since John didn't seem to be telling anyone about it, Frank decided not to tell anyone either.

% choosing Sympathetic: 60

Other constructs chosen: Considerate (4)  
Thoughtful (2)

Antonym: Not Sympathetic

Hypothetical prototypic pattern: Although capable, P does nothing to assist O in an uncomfortable situation

These results imply that there may be a more general construct which encompasses thoughtful, sympathetic, helpful, and considerate.

#### 24. Calm

Context: O or group have done something which has the potential to upset or anger P

Hypothetical prototypic pattern: O or group commit act; P does not react in a negative emotional manner

#### Anecdotes

A. Margie's sister borrowed her favorite blouse. She wore it to work and got ink stains all over it. When she told Margie what had happened, Margie didn't get upset. She just asked her sister to replace it as soon as possible.

% choosing Calm: 67

Other constructs chosen: Sympathetic (3)  
Unreliable (1)  
Sloppy (1)

B. Jodie has five little brothers and sisters. Little children can sometimes get on your nerves with a lot of the things that they do, but I have never heard Jodie raise her voice to any of them, and I have never seen her spank them.

% choosing Calm: 53

Other constructs chosen: High Principles (5)  
Intolerant (2)

Antonym: Not Calm

Hypothetical prototypic pattern: O or group has done something which has the potential to upset or anger P; P's reaction is an emotional outburst; this behavior is consistent even when the act is minor

Calm is not an active emotion; it reflects the absence of an active emotional state. Sympathetic and high principles are potential reasons "why" an individual would choose not to engage in what may be the more expected emotional manner. Although many subjects did infer calm, a number chose more active constructs.

In addition, since tolerant is similar to calm in that it is the absence of an active emotion, it is assumed that subjects mistook intolerant for tolerant. Subjects who inferred unreliable and sloppy from the "Margie" anecdote evidently focused on the sister as the target individual.

#### 25. Not Snobbish

Context: P is in a situation where O or group may be regarded as inferior

Hypothetical prototypic pattern: P possesses what is regarded as a special quality or object; P associates with O or group who does not possess the same; P positively interacts with, rather than avoids O or group

#### Anecdotes

- A. A very famous actor came to speak at our school. He brought his son Jeff along. Although Jeff goes to a wealthy private school, he said only good things about our school. He even joined us in a game of tackle football.



% choosing Not Snobbish: 0

B. Even though Mark comes from one of the wealthiest families in the state, you would never know it. He dresses just like us, and hangs around us all of the time.

% choosing Not Snobbish: 0

Antonym: Snobbish

Hypothetical prototypic pattern: P possesses what is regarded as a special quality or object; P rejects or avoids O or group, who does not possess the same

Not snobbish is a negation of a negative emotion, but the anecdotes readily evoked several positive constructs such as friendly, outgoing, fun to be with, and likable (although no consensual agreement was found). It appears that again perceivers readily infer the presence of an active state, rather than the absence of a negative state.

## 26. Breaks Rules

Context: P is expected to follow established rules

Hypothetical prototypic pattern: P and O, or P and group, know and understand established rules, P has the opportunity not to follow the prescribed behavior; P takes advantage of the opportunity

Anecdotes

A. Jenny's parents had to go out of town for the weekend. Jenny asked if she could stay by herself. Her parents said

yes, but that she couldn't have any friends over until they returned. Jenny agreed. On Friday and Saturday night she had really big parties at her house.

% choosing Breaks Rules: 46

B. After the math teacher handed out the quizzes she left the room. John noticed that she had left the answer sheet on her desk. He got up and copied all of the correct answers onto his paper before she returned.

% choosing Breaks Rules: 42

Antonym: Abides by the Rules

Hypothetical prototypic pattern: P and O, or P and group, know and understand established rules; P has the opportunity not to follow the prescribed behavior; P does not take advantage of that opportunity

Less than half of the subjects inferred the intended construct from either anecdote, although each anecdote described concrete behaviors which clearly violated established rules. The majority of the subjects did infer negative, more abstract constructs from the anecdotes (e.g., liar, unscrupulous, insincere, unreliable, and not trustworthy) although no consensual agreement was found. In several instances, for both anecdotes, adventurous was inferred, possibly resulting from an inferred level of risk associated with the behaviors.

Summary. Very good consensus was found for 18, or 69% of the constructs. Fair consensus was obtained for 24 of the 26 constructs, or 92%.

To continue this study, one anecdote was chosen from each of the 18 successful constructs. These anecdotes were used to determine whether or not junior high students and college students sort these constructs along similar, underlying organizing themes. The procedures and results are reported in the following chapter.

## CHAPTER IV

### AGE DIFFERENCES IN CATEGORIZING BEHAVIOR

This chapter explains the procedures and results used to determine differences in categorizing behavior between junior high students and college students. The question remains whether or not junior high students make the same kinds of discriminations among prototypic behaviors that college students make, even though they may not use adult labels to identify those behaviors. In addition, it may be asked whether the organizing principles used by junior high students to categorize their constructs are similar to those used by college students.

Two sets of analyses are conducted to provide both an individual and an aggregate measure of the extent to which individuals differentiate among anecdotes, and the extent to which the structure of anecdotes differed across groups, respectively. These two sets of analyses will be discussed separately.

#### Method

Subjects. Two groups of subjects participated in this study. One group consisted of the Baldwin Junior High School students previous described. The second group consisted of 52 undergraduate students enrolled in the basic Speech Communication course at Indiana

University Southeast, again with backgrounds similar to those of the junior high students.

Procedures. The 18 anecdotes described in Chapter II were reproduced on 3 x 5 notecards, one anecdote per card. Each subject was given a packet which contained the 18, 3 x 5 notecards. Subjects were asked to perform three tasks. First, they were asked to read each anecdote and then sort them into categories which they felt were appropriate. To discount the previously discussed tendency to view inferences along a bi-polar, social good/social bad factor, the following instructions were given:

These cards contain behaviors which we see people perform every day. Please put these cards into categories. Do not think of the behaviors which are described as being "good" or "bad." Rather, think of them as describing behaviors which are alike or not alike, similar or not similar. Use as many categories as you wish.

Each subject was given approximately 30 minutes to complete the entire categorization process. Once subjects had initially placed the anecdotes into categories, they were asked to record each category on a form specifically designed for that purpose (see Appendix D). They were then asked to consider whether each category could be further divided, asked to record those new categories, and so on, until they felt they could no longer make any new categories.

Subjects were then given a booklet which contained nine anecdotes; one half of the junior high students and college students were given one set of nine, the other half was given the remaining set of nine. Subjects were asked to record a word which best described the target individual in each anecdote. Finally, subjects were given an additional booklet, again containing the appropriate 9 anecdotes, and were asked to indicate their first and second choices from a checklist of constructs containing the 18 intended constructs plus 18 distractors.

## Results

### Comparison of age groups on number of categories.

The total number of categories (i.e., total sum across all levels) formed by junior high students ranged from 10 to 18, with a mean number of 14.15. For college students, the total number of categories formed ranged from 12 to 25, with a mean number of 17.96. A simple comparison of these figures, however, would be inappropriate since a measure of the total number of categories cannot account for redundancy. Rather, Scott, Osgood, and Peterson's (1979) measure of dimensional complexity was used to determine the extent to which individuals differentiated among the anecdotes.

This measure uses the  $\underline{H}$  statistic, a measure of dimensional complexity derived from information theory. It measures complexity in terms of the number of independent dimensions present in the subject's categorization system. Since it is a structural measure, it does not represent the meaning of the items being sorted. This measure has previously been used by Linville (1982) to evaluate the relation between complexity of subjects and age-based stereotyping, and in a similar study of stereotyping of the aged by Brewer and Lui (1984).

The  $\underline{H}$  statistic was calculated for each subject as follows:  $\underline{H} = \log_2 n - (\sum n_i \log_2 n_i) / n$ , where  $n$  = total number of anecdotes, and  $n_i$  = the total number of items which appear in a particular group combination. The statistic may range between 1 and  $\log_2 n$ , with a larger  $\underline{H}$  indicating greater dimensional complexity. In this study, with  $n = 18$ , the  $\underline{H}$  may range between 1 and 4.17. Actual  $\underline{H}$  statistics in the present study ranged from 2.11 to 3.95. The mean numbers of final categories formed by each group, and the mean  $\underline{H}$  statistics for both groups are shown in Table 8. College students had significantly higher mean  $\underline{H}$  statistics than junior high students  $t(102) = 2.72$ ,  $p < .01$ . Because this measure takes redundancy into account, these results indicate that individual

college students categories showed more dimensional complexity than those of the junior high students. That is, the older groups appears to be able to differentiate among patterns of behavior to a greater extent than the younger group.

Table 8  
H Statistic and Final Category Mean Numbers

Measure	College Students	Junior High Students
<u>H</u> (complexity)	3.60	3.15
Number of Categories	13.16	10.90

Comparison of groups on clustering of anecdotes. An aggregate measure of the extent to which the structure of the anecdotes differed across groups was obtained through the use of a hierarchical clustering analysis of the categories produced by each group. Hierarchical clustering procedures provide a means of computing the structural relatedness of the items.

The particular method of cluster analysis used in this study employed the average link criterion. This method begins with the total number of traits and sequentially merges them until all traits are included, thus producing clusters which contain traits or other



clusters. Each trait then becomes a member of a cluster, and the average dissimilarity between each member of that cluster and the other members is smaller than the dissimilarity with members of any other cluster.

The results of the cluster analysis for the two groups for the 18 traits are shown in Tables 9 and 10, respectively. The structure of the subject-generated categories is represented in tree diagrams, which are scaled on the basis of similarity values (roughly, correlations) between the traits and clusters.

Both tree diagrams produced three higher order clusters, containing the same traits for both groups in each cluster. Neither group had good agreement on the lowest level clusters. Overall, similarities were low; the average similarity for college students was 36, and for junior high students it was 30. In addition, only two lowest level clusters were the same for both groups (shy and unsociable; moody and bad tempered).

These results indicate not only that the basic structure for college students and junior high students was weak, but also that college students and junior high students may be sorting constructs according to different criteria. A subjective review of category members suggests two problems: (a) Subjects appear to be influenced by situational elements which acted as sorting

**Table 9**  
**Hierarchical Structure of College Student Categories**

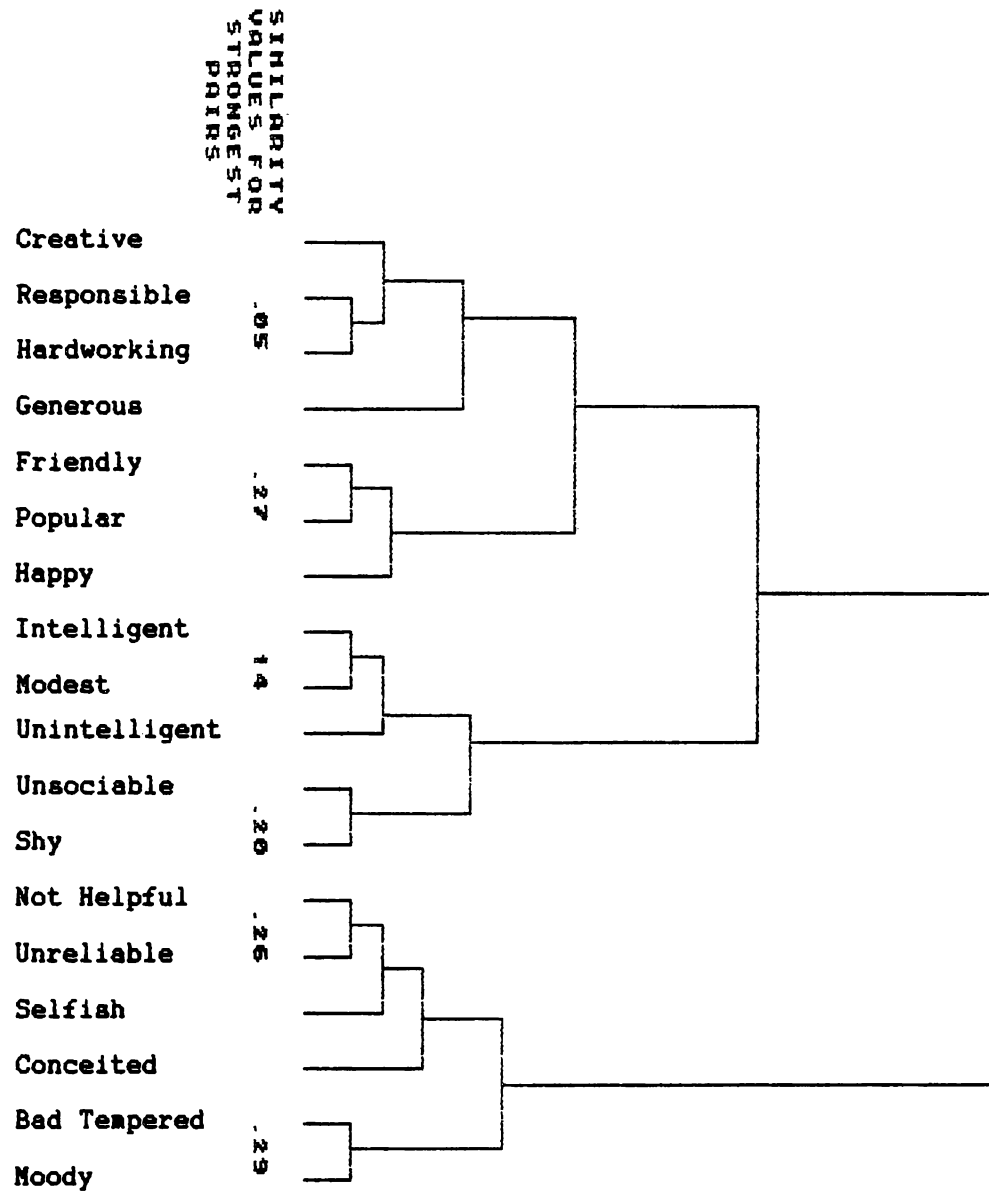
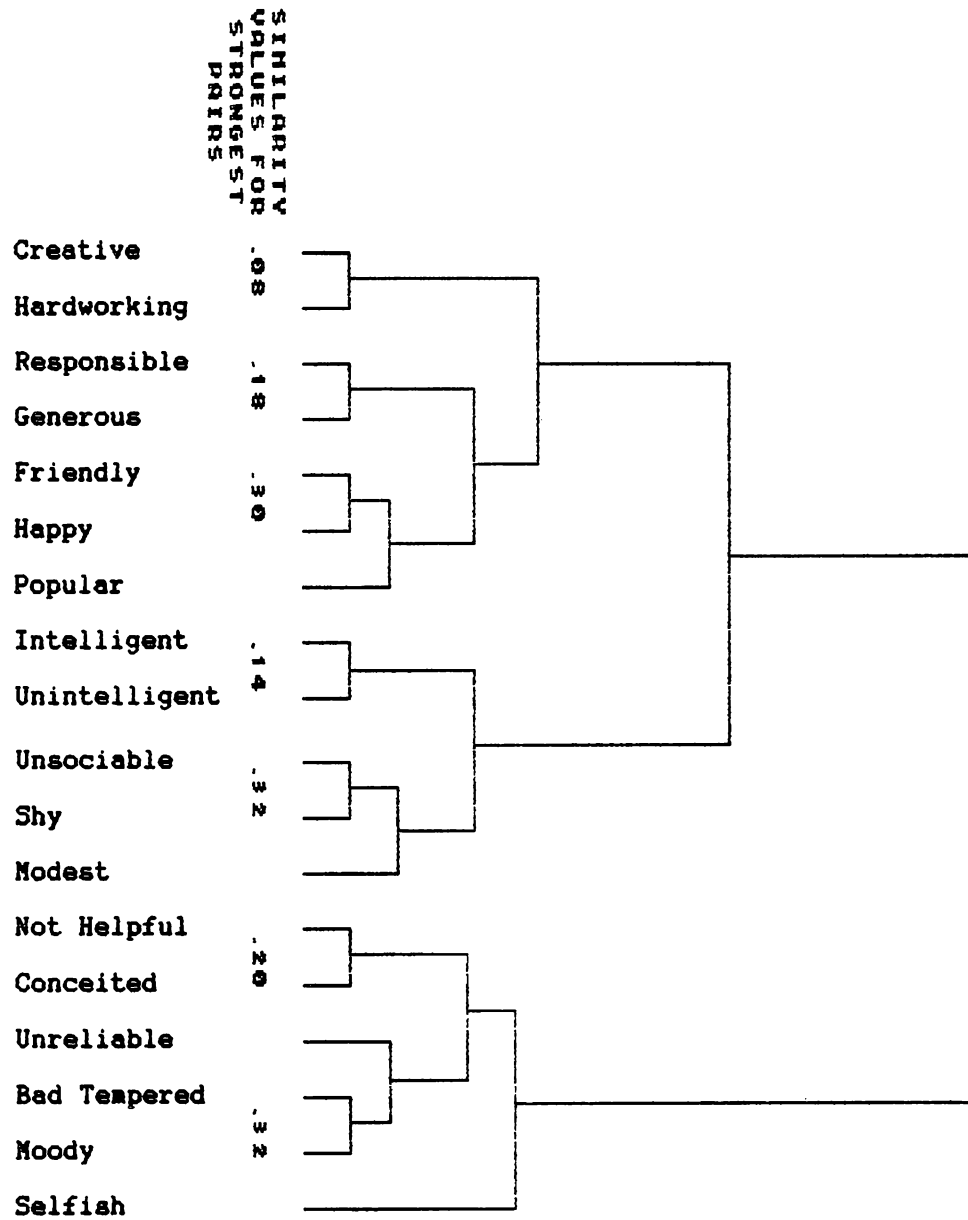


Table 10  
 Hierarchical Structure of Junior High Student Categories



cues (e.g., many subjects paired intelligent and modest; the anecdote for modest concerned a person who had received all A's); and (b) the category recording sheet used may have led subjects to believe that they were limited to or not expected to use more categories than were allowed for, although they were instructed to request additional sheets if necessary.

Comparison of groups on constructs inferred from anecdotes. A final analysis was conducted to determine whether or not the junior high students would make the same kinds of inferences from concrete patterns of behavior to interpersonal constructs as college students.

Immediately following the free sorting task, subjects were given booklets which contained 9 of the 18 anecdotes (see Appendix E). One half of the college students and junior high students received one set of nine; the other half received the remaining nine. Subjects were asked to read each anecdote, and to write first and second choice words which best described the person in the anecdote. When the subjects had completed this task, they were given an additional booklet, again containing the same nine anecdotes. This time, however, the booklet also contained a checklist of the 18 intended constructs, plus another 18 distractors (see Appendix F).

Subjects were asked to indicate their first and second choices from the checklist for each anecdote.

Results. Very good consensus (i.e., 80% or greater agreement) was obtained from the college students for all of the 18 intended constructs. Among the junior high students, however, very good consensus was obtained for only five of the intended constructs, or 28%, while fair consensus (i.e., 50% or greater agreement) was obtained for 17 of the 18 intended constructs. The complete list of intended constructs in each set and the percentage of subjects who inferred each construct from the appropriate anecdote are shown in Table 11. Older subjects not only chose the intended construct more often, but they also had more consensus among themselves for unintended constructs. For first choice responses, college students chose a mean number of 2.5 different constructs per response; junior high students, however, chose a mean number of 5.3 different constructs per response.

Two representative examples clarify this outcome. The anecdote for the intended construct responsible fared well in both groups (college students, 92%; junior high students, 77%). First choice responses for college students were responsible (24) and courteous (2). First choice responses for junior high students were responsible (20), cautious (1), friendly (1), good (1),

Table 11  
 Percentages of Subjects Who Inferred the  
 Intended Constructs

Construct	College Students		Jr. High Students	
	1st Choice	Total	1st Choice	Total
1. Unintelligent	80	92	65	69
2. Hardworking	80	80	73	80
3. Selfish	92	100	77	77
4. Popular	100	100	88	92
5. Happy	77	80	30	57
6. Creative	85	92	50	65
7. Moody	80	80	42	50
8. Shy	96	100	69	73
9. Modest	80	85	34	34
1. Conceited	80	85	73	73
2. Friendly	92	100	65	69
3. Responsible	92	96	77	80
4. Not Helpful	100	100	80	80
5. Unsociable	80	80	50	57
6. Intelligent	96	100	73	77
7. Bad Temper	85	92	65	69
8. Generous	96	100	77	77
9. Unreliable	100	100	80	88

and nice(1). A construct which did not fare as well in either group was happy (college students, 77%; junior high students, 30%). From the anecdote, college students inferred the intended construct happy (20) and the unintended construct friendly (6). Junior high students had no such consensus. They inferred a broad range of constructs from the anecdote: happy(8), friendly (4), nice (3), broad-minded (2), responsible (2), anxious (2), conceited (1), modest (1), hardworking (1), courteous (1), and helpful (1).

Three particularly global constructs were included on the checklist: nice, good, and mean. It was predicted that junior high students would choose these words more frequently than college students, and indeed they did as shown in Table 12.

Junior high students are as likely to infer a global construct as a first choice as they are a second choice. College students on the other hand, appear to be more likely to infer a global construct as a second choice, possibly due to the lack of an additional appropriate differentiated construct. These results indicate that junior high students are not only content with but prefer global constructs, while college students infer them only when a more appropriate, more differentiated construct is unavailable.

Table 12

Global Construct Choices for Junior High Students and College Students

	First Choice				Second Choice			
	Nice	Good	Mean	Total	Nice	Good	Mean	Total
College Students	2	2	4	8	9	4	6	19
Junior High Students	16	6	14	36	18	4	8	30



CHAPTER V  
DISCUSSION

The general purpose of this investigation was to examine the similarities and differences between college students' and junior high students' use of verbalized interpersonal constructs, the relation between the two groups' cognitive organization of those constructs from unlabeled actions-in-context, and to explore differences between how college students and junior high students label those actions-in-context.

The results of the first stage of this study confirmed the first hypothesis, which predicted systematic differences between the kinds of interpersonal constructs used in impression formation by junior high students, and those used by college students. The two groups differed significantly as to the total number of interpersonal constructs used to describe people they knew well. More importantly, the results clearly showed consistent production differences between the two groups in the quality of the constructs employed (i.e., college students generated constructs which were more nonegocentric and abstract than those of the junior high students.

These results are important for several reasons. First, they establish that significant production

differences exist between older children and young adults. Another, more interesting finding was that both groups employed a considerable number of global constructs.

College students did not find global constructs to be sufficient for their descriptions; they consistently elaborated with more differentiated constructs. That adults did not find global constructs to be sufficient descriptions in and of themselves, but still freely and frequently produced these constructs parallels Anglin's (1977) theory of concept development (i.e., adults do not lose or substitute for global concepts, but rather supplement them and refine them). A similar process appears to hold for construct development. Although adults do not lose or replace global constructs, they consistently elaborate them with more differentiated ones.

Junior high students did use more abstract constructs than any other type, and many of these constructs were global. Unlike college students, however, when junior high students produced global constructs, little or no elaboration in the form of more differentiated constructs was provided. That is, though this age group did incorporate more abstract constructs into their descriptions than their younger counterparts

(see Scarlett, Press, & Crockett, 1971), most further elaborations took the form of concrete construct descriptions, implying that specific aspects of others' behavior and appearance are still more salient among this age group. Additional support for this interpretation is that junior high students' descriptions, particularly for those "unliked" others, were primarily focused upon social rule-governed behavior (e.g., "he always talks in class when it isn't his turn" or "he never takes a bath"), rather than on relationally oriented behavior. That junior high students may have difficulty recognizing and differentiating among behaviors prototypic for numerous interpersonal constructs received additional support from the results of the analyses conducted to test the second hypothesis.

Hypothesis 2 first predicted that junior high students would organize their interpersonal constructs in a more global manner than would college students. Results of the analysis support this claim. The subjects were provided with anecdotes consisting of prototypic patterns of action for a variety of interpersonal constructs. To obtain subject-generated categories, subjects were asked to sort these anecdotes into as many categories as they felt appropriate. An individual measure of dimensional complexity, the  $H$  statistic, was

used to determine the number of independent dimensions present in each individual's categorization system. Since this structural measure takes redundancy into account, it is a more appropriate way of determining dimensional complexity than simply comparing the total number of categories generated by each subject.

College student categories were significantly more dimensionally complex than those of the junior high students ( $t(102) = 2.72, p < .01$ ). This finding is particularly important because at the outset one may argue that younger subjects' constructs are characteristically more global and diffuse because they lack the sufficient vocabulary used by older subjects to express those constructs. By design, however, vocabulary was not a factor that entered into the sorting of actions-in-context (i.e., interpersonal construct labels were not provided); hence, subjects only saw the anecdotes that described prototypic actions.

Since vocabulary differences were controlled for, these results appear to indicate that older children are as yet unable to distinguish, and give meanings to various types of behaviors, resulting in a lower ability to differentiate among those behaviors. This has important implications for assessing and interpreting a child's level of communication competence, particularly

in relation to the areas of tactical and strategic communication. Previous research by Delia, Kline, and Burleson (1979) has indicated that children with a greater number of interpersonal constructs, especially constructs which represent personality dimension and motivations, have greater control over their communication at the abstract level of tactics and strategies. It seems clear that the child who is unable to distinguish, give meaning to, and consequently differentiate among those behaviors will have difficulty developing control over communication at the abstract levels necessary for (a) generally understanding ways in which personality characteristics relate to one another, and their causative effects on future behavior, and (b) specifically engaging in higher level communication processes, such as strategic communication.

This concern is further underscored by the Delia study, which also found that even with the effects of age partialled out, a child's ability to engage in abstract levels of strategic communication was predicted by both cognitive complexity and construct abstractness (a hierarchical assessment of construct type, similar to the one used in this investigation, with psychological traits, dispositions, and motivations representing the highest order constructs). Thus, it cannot be assumed

that an increase in a child's vocabulary will automatically result in a broadening of the child's construct system. Nor can we assume that more abstract and complex person perception processes will develop with maturity.

Still further evidence for the causal nature of the concrete behaviors-to-interpersonal constructs link comes from the recent work of Barenboim (1981). Previously cited research concerning the characteristics of children's constructs, and the relation of construct systems to successful involvement in abstract communication, was cross-sectional in nature. By using a longitudinal design, Barenboim found that children's person perception processes did, in fact, follow a definite developmental sequence. His results support the assumption that this sequence is causal in nature (i.e., "behavioral comparison leads to the creation and use of psychological constructs, which, in turn, leads to the creation and use of psychological comparisons," Barenboim, 1981, p. 138). The question of whether we can assist the child in distinguishing behaviors, and in finding new constructs (and, perhaps, more socially shared ones) merits further investigation, particularly for the child who is a poor communicator.

An attempt to discover structural similarities and differences across groups was made using a hierarchical clustering procedure which employed the average link criterion. The basic structure for college students and junior high students was weak. At most it can be said that both groups generated three main categories which consisted of the same traits.

At this point, the most probable explanation for the weak structural results was that the sorting task and category recording sheets used were not conducive to assisting subjects in distinguishing behavioral similarities and/or differences. A subjective exploration of the categories generated appears to indicate two problems: (a) Although subjects were asked to request additional scoring sheets if necessary, they apparently were influenced by the number of categories on the scoring sheet, assuming that the number of categories allowed for on the sheet was all that was expected from the investigator; and (b) the sorting task directions apparently did not adequately assist subjects to focus on the concrete behaviors described in each anecdote.

A final analysis was conducted to examine whether junior high students make the same kinds of inferences from concrete patterns of behavior to interpersonal constructs as do college students. Both groups were

asked to look once again at the anecdotes used in the previous experiment (each one contained a behavior prototypic for a particular interpersonal construct), and to indicate a first and second choice response from a checklist containing the 18 intended constructs plus another 11 distractors. Very good consensus (i.e., 80% or greater agreement) was obtained from the college students for all of the 18 intended constructs; they also showed good consensus regarding unintended constructs which were also conceptually consistent with the intended construct. This finding further supports a portion of Crockett's (1983) theoretical model of person perception, which assumes that specific, identifiable patterns of behavior are prototypic for the attribution of particular interpersonal constructs.

In contrast, among the junior high students, very good consensus was obtained for only 5 of the intended constructs; however, fair consensus (i.e., 50% or greater agreement) was obtained for 17 of the 18 intended constructs. It appears that developmentally, these older children are beginning to find some social consensus. Interestingly, the construct for which there was the greatest consensus was "popular," possibly due to the increasing awareness of and heightened social pressure of being liked at this age.



The unintended constructs chosen by the junior high students were, for the most part, conceptually consistent with the intended construct, although there were a fair number of exceptions. The random nature of these idiosyncratic instances appears to indicate that this result does not stem from vocabulary difficulties, but rather from their failure to give meaning to various behaviors.

Support for the above claim was found when examining the junior high students' use of global constructs. Three particularly global distractors were included in the checklist: nice, good, and mean. As predicted, this group chose these global constructs more frequently than college students, inferring them a total of 36 times as a first choice, as compared to the older students, who inferred them only 8 times as a first choice. When they were inferred as a first choice by junior high students, they were always conceptually consistent with the intended construct (unlike other abstract, unintended constructs). These results are important for two reasons: (a) They indicate that at some level junior high students can distinguish and give at least a very general meaning to behaviors before they can label them (e.g., the inference of "good" for "creative"); and (b) even if junior high students can distinguish behavior and

verbalize the intended personal construct, they often prefer to use the global (and conceptually consistent) construct, unlike college students who, when they used a global construct, most often employed it as a second choice, particularly when another appropriate abstract interpersonal construct was not available.

Taken as a whole, the findings in this investigation indicate that person perception processes fundamentally depend upon the ability to distinguish and give meaning to behaviors. The framework out of which this research grows is based upon the assumptions that (a) junior high students' constructs are more global and concrete than those of college students, and (b) that person perception processes are in part based on the attribution of interpersonal constructs from identifiable patterns of action.

## REFERENCES

- Anglin, J. M. (1977). Word, object, and conceptual development. New York: Norton.
- Asch, S. E. (1946). Forming impressions of personality. Journal of Abnormal and Social Psychology, 41, 258-290.
- Barenboim, C. (1981). The development of person perception in childhood and adolescence: From behavioral comparisons to psychological constructs to psychological comparisons. Child Development, 52, 129-144.
- Bartlett, F. C. (1932). Remembering. Cambridge: Cambridge University Press.
- Bates, E. (1979). The emergence of symbols: Cognition and communication in infancy. New York: Academic Press.
- Bates, E., Benigni, L., Bretherton, I., Camaioni, L., & Volterra, V. (1977). From gesture to the first word: On cognitive and social prerequisites. In M. Lewis & L. Rosenblum (Eds.), Interaction, conversation, and the development of language (pp. 247-307). New York: John Wiley and Sons.
- Brewer, M. B., & Lui, L. (1984). Categorization of the elderly by the elderly: Effects of perceiver's

- category membership. Personality and Social Psychology Bulletin, 10(4), 585-595.
- Brown, R. (1973). A first language: The early stages. Cambridge, MA: Harvard University Press.
- Burleson, B. R. (1980). The development of interpersonal reasoning: An analysis of message strategy justifications. Journal of the American Forensic Association, 17, 102-110.
- Burleson, B. R. (1982). The development of comforting communication skills in childhood and adolescence. Child Development, 53, 1578-1588.
- Burleson, B. R. (1984a). Age, social-cognitive development, and the use of comforting strategies. Communication Monographs, 51, 140-153.
- Burleson, B. R. (1984b, April). A commentary on Miriam Thom's "A conceptual framework for the study of personal construct and language development in children." Paper presented at the annual convention of the Central States Speech Association, Chicago.
- Clark, E. V. (1973). Nonlinguistic strategies and the acquisition of word meanings. Cognition, 2, 161-182.
- Clark, R. A., & Delia, J. G. (1976). The development of functional persuasive skills in childhood and early adolescence. Child Development, 47, 1008-1014.

- Crockett, W. H. (1965). Cognitive complexity and impression formation. In B. A. Maher (Ed.), Progress in experimental personality research (Vol. 2). New York: Academic Press.
- Crockett, W. H. (1977). Impressions and attributions: Nature, organization, and implications for action. Paper presented at the annual meeting of the American Psychology Association, Washington, DC.
- Crockett, W. H. (1982). The organization corollary. In J. C. Mancuso & J. R. Adams-Webber (Eds.), Systems of personal constructs. New York: Praeger Press.
- Crockett, W. H. (1983, July). Constructs, impressions, actions, responses, and construct change: A model of processes in impression formation. Paper presented at the Fifth International Conference of Personal Construct Psychology, Boston.
- Crockett, W. H., & Thom, M. R. (1983). Prototypic behaviors and the inference of interpersonal constructs. Paper presented at the Conference of Social Cognition and Interpersonal Behavior, University of Kansas, Lawrence.
- Delia, J. G., & Clark, R. A. (1977). Cognitive complexity, social perception, and the development of listener-adapted communication in six-, eight-,

- ten-, and twelve-year-old boys. Communication Monographs, 44, 326-345.
- Delia, J. G., Kline, S. L., & Burleson, B. R. (1979). The development of persuasive communication strategies in kindergartners through twelfth-graders. Communication Monographs, 46, 241-256.
- Fischer, K. W., & Corrigan, R. A. (1981). A skill approach to language development. In R. Stark (Ed.), Language behavior in infancy and early childhood. Amsterdam: Elsevier-North Holland.
- Francis, W. N., & Kucera, H. (1982). Frequency analysis of English usage: Lexicon and grammar. Boston: Houghton Mifflin.
- Furth, H. G. (1966). Thinking without language: Psychological implications of deafness. New York: The Free Press.
- Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.
- Kelly, G. A. (1955). The psychology of personal constructs. New York: Norton.
- Linville, P. W. (1982). The complexity-extremity effect and age-based stereotyping. Journal of Personality and Social Psychology, 42, 193-211.
- Little, B. (1968). Factors affecting the use of psychological versus non-psychological constructs of

- the repertory test. Bulletin of the British Psychological Society, 21, 34.
- Livesley, W. J., & Bromley, D. B. (1973). Person perception in childhood and adolescence. London: John Wiley.
- Masangky, Z. S., McClusky, C. A., McIntyre, C. W., Sims-Knight, J., Vaughen, B. E., & Flavell, J. H. (1974). The early development of inferences about the visual percepts of others. Child Development, 45, 357-366.
- Neisser, V. (1976). Cognition and reality: Principles and implications of cognitive psychology. San Francisco: W. H. Freeman.
- O'Keefe, B. J., & Delia, J. G. (1982). Impression formation processes and message production. In M. E. Roloff & C. R. Berger (Eds.), Social cognition and communication. Beverly Hills, CA: Sage.
- Peevers, B. H., & Secord, P. F. (1973). Developmental changes in attribution of descriptive concepts to persons. Journal of Personality and Social Psychology, 27, 120-128.
- Quillian, M. R. (1969). The teachable language comprehender: A simulation program and theory of language. Communications of the A.C.M., 12, 459-476.

- Rice, M. L., & Kemper, S. (1984). Child language and cognition. Baltimore: University Press.
- Rosch, E. (1975). Cognitive reference points. Cognitive Psychology, 7, 532-547.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), Cognition and categorization. Hillsdale, NJ: Erlbaum.
- Rosch, E., Mervis, C. G., Gray, W. D., Johnson, D. M., & Boyes-Braem, P. (1976). Basic objects in natural categories. Cognitive Psychology, 8, 382-439.
- Rosenbach, D., Crockett, W. H., & Wapner, S. (1973). Developmental level, emotional involvement, and the resolution of inconsistency in impression formation. Developmental Psychology, 8, 120-130.
- Scarlett, H., Press, A., & Crockett, W. H. (1971). Children's descriptions of peers: A Wernerian developmental analysis. Child Development, 42, 439-453.
- Scott, W. A., Osgood, D. W., & Peterson, C. (1979). Cognitive structures: Theory and measurement of individual differences. Washington, DC: V. H. Winston.
- Shank, R., & Abelson, R. (1977). Scripts, plans, goals, and understanding. Hillsdale, NJ: Lawrence Erlbaum Associates.



Shields, M. M. (1978). The child as psychologist:  
Construing the social world. In A. Lock (Ed.),  
Action, gesture, and symbol: The emergence of  
language. London: Academic Press.

Slobin, D. I. (1973). Cognitive prerequisite for the  
development of grammar. In C. A. Ferguson & D. I.  
Slobin (Eds.), Studies of child language  
development (pp. 175-208). New York: Holt,  
Rinehart, and Winston.

APPENDIX A

Role Category Questionnaire Instructions

## Role Category Questionnaire Instructions

### Adults

Our interest in the questionnaire is to learn how people describe others whom they know. We are interested in knowing, in your own terms, the characteristics which a set of individuals have--those which set one person off from another as an individual, and those characteristics which they share in common.

Our concern is with the habits, ideas, mannerisms--in general, with the personal characteristics, rather than physical traits, which characterize a number of different people.

In order to make sure that you are describing real people, we have set down a list of four categories of people. In the blank space beside each category below, please write the initials, nickname, or other identifying symbol for a person of your acquaintance who fits into that category. Be sure to use a different person for each category.

1. A man your own age whom you like \_\_\_\_\_
2. A man your own age whom you dislike \_\_\_\_\_
3. A woman your own age whom you like \_\_\_\_\_
4. A woman your own age whom you dislike \_\_\_\_\_

Spend a few moments looking over this list, mentally comparing and contrasting the people you have in mind for each category. Think of their habits, their beliefs, their mannerisms, their relations to others, any characteristics they have which you might use to describe them to people.

If you have any questions about the kinds of characteristics we're interested in, please ask them now.

Do not turn the page until instructed to do so.

Please look back to the first page and place the symbol you have used to designate the person in **Category 1**, here. Now describe the person as fully as you can. Write down as many defining characteristics as you can. Do not simply put down those characteristics that distinguish him from others on your list, but include any characteristics that he shares with others, as well as characteristics that are unique to him. Pay particular attention to his habits, beliefs, ways of treating others, mannerisms, and similar attributes. Remember, describe him as completely as you can, so that a stranger might be able to determine the kind of person he is from your description.

Please look back to the first page and place the symbol you have used to designate the person in **Category 2**, here. Now describe the person as fully as you can. Write down as many defining characteristics as you can. Do not simply put down those characteristics that distinguish him from others on your list, but include any characteristics that he shares with others, as well as characteristics that are unique to him. Pay particular attention to his habits, beliefs, ways of treating others, mannerisms, and similar attributes. Remember, describe him as completely as you can, so that a stranger might be able to determine the kind of person he is from your description.

Please look back to the first page and place the symbol you have used to designate the person in **Category 3**, here. Now describe the person as fully as you can. Write down as many defining characteristics as you can. Do not simply put down those characteristics that distinguish her from others on your list, but include any characteristics that she shares with others, as well as characteristics that are unique to her. Pay particular attention to her habits, beliefs, ways of treating others, mannerisms, and similar attributes. Remember, describe her as completely as you can, so that a stranger might be able to determine the kind of person she is from your description.

Please look back to the first page and place the symbol you have used to designate the person in **Category 4**, here. Now describe the person as fully as you can. Write down as many defining characteristics as you can. Do not simply put down those characteristics that distinguish her from others on your list, but include any characteristics that she shares with others, as well as characteristics that are unique to her. Pay particular attention to her habits, beliefs, ways of treating others, mannerisms, and similar attributes. Remember, describe her as completely as you can, so that a stranger might be able to determine the kind of person she is from your description.

## Children

I'm here with you today because I am trying to learn how people describe other people whom they know. I don't know the boys and girls that you know, so I would like you to tell me about them. I don't want to know their names or what they look like. I only want to know what kind of people they are.

Think of a boy your own age whom you like. How does he act? It is the same way that other people you know act, or is it different? How does this boy treat other people?

Now in the blank space at the end of the sentence, write this boy's initials, or his nickname, so that you could look back to this page and remember who you have in mind.

1. A boy your own age whom you like \_\_\_\_\_

Now think of a boy your own age whom you dislike. Write his initials in the blank space at the end of the sentence.

2. A boy your own age whom you dislike \_\_\_\_\_

Think of a girl your own age whom you like. Write her initials in the blank space at the end of the sentence.

3. A girl your own age whom you like \_\_\_\_\_

Think of a girl your own age whom you dislike. Write her initials in the blank space at the end of the sentence.

4. A girl your own age whom you dislike \_\_\_\_\_

Look back over this list. Think about these boys and girls. How are they alike? How are they different? Think of how they act, how they treat others, anything about them that you would use to describe them to people. If you have any questions about the kind of description I am asking you to write, please ask me now.

Do not turn the page until instructed to do so.



Please look back to the first page, and put the initials of the **boy you like** here.

Now describe this boy as fully as you can. Tell me how he acts, how he treats others. I don't want to know what this boy looks like, but I do want to know how he behaves. Tell me about the things that make him like other people you know, and about the things that make him different. Remember, I don't know this boy, so tell me as much about him as you can, so that I will know from reading your description what this boy is like.

Please look back to the first page, and put the initials of the **boy you dislike** here.

Now describe this boy as fully as you can. Tell me how he acts, how he treats others. I don't want to know what this boy looks like, but I do want to know how he behaves. Tell me about the things that make him like other people you know, and about the things that make him different. Remember, I don't know this boy, so tell me as much about him as you can, so that I will know from reading your description what this boy is like.

Please look back to the first page, and put the initials of the **girl you like** here.

Now describe this girl as fully as you can. Tell me how she acts, how she treats others. I don't want to know what this girl looks like, but I do want to know how she behaves. Tell me about the things that make her like other people you know, and about the things that make her different. Remember, I don't know this girl, so tell me as much about her as you can, so that I will know from reading your description what this girl is like.

Please look back to the first page, and put the initials of the **girl you dislike** here.

Now describe this girl as fully as you can. Tell me how she acts, how she treats others. I don't want to know what this girl looks like, but I do want to know how she behaves. Tell me about the things that make her like other people you know, and about the things that make her different. Remember, I don't know this girl, so tell me as much about her as you can, so that I will know from reading your description what this girl is like.

APPENDIX B  
Categorization Task

## Categorization Task

This is a list of words we commonly use to describe other individuals. Please put these words into categories, using any manner which you deem fit. Do not think of these words as describing behaviors which are "good" or "bad." Think of them as describing behaviors which are similar, or not similar. Use as many categories as necessary.

- |                        |                             |
|------------------------|-----------------------------|
| 1. Intelligent         | 20. Smart                   |
| 2. Happy               | 21. Sensitive               |
| 3. Good sense of humor | 22. Funny                   |
| 4. Talkative           | 23. Outspoken               |
| 5. Conceited           | 24. Brags                   |
| 6. Likes sports        | 25. Outgoing                |
| 7. Rude                | 26. Interrupts others       |
| 8. Selfish             | 27. Greedy                  |
| 9. Silly               | 28. Childish                |
| 10. Responsible        | 29. Reliable                |
| 11. Honest             | 30. Religious               |
| 12. Smells horrible    | 31. Sloppy                  |
| 13. Good leader        | 32. Willing follower        |
| 14. Cares about others | 33. Helps others            |
| 15. Nice               | 34. Kind                    |
| 16. Proud              | 35. Knows what he/she wants |
| 17. Intimidates others | 36. Sociable                |
| 18. Sweet              | 37. Obnoxious               |
| 19. No pride           | 38. Likes to argue          |

- |                              |                           |
|------------------------------|---------------------------|
| 39. Loud                     | 63. Friendly/not friendly |
| 40. No common sense          | 64. Warm                  |
| 41. Easy-going               | 65. Sarcastic             |
| 42. Rarely jokes             | 66. Boisterous            |
| 43. Can't shut up            | 67. Complains             |
| 44. Insecure                 | 68. Understanding         |
| 45. Good athlete             | 69. Forgiving             |
| 46. Good student             | 70. Thoughtful            |
| 47. Never gets angry         | 71. Gossips               |
| 48. Easy to talk to          | 72. Liar                  |
| 49. Self-centered            | 73. Open                  |
| 50. Talented                 | 74. Logical               |
| 51. Well-mannered            | 75. Smiles a lot          |
| 52. Shares                   | 76. Always in a good mood |
| 53. Immature                 | 77. Listens to others     |
| 54. Works hard               | 78. Egotistical           |
| 55. Not religious            | 79. Shy                   |
| 56. Polite                   | 80. Courteous             |
| 57. Hates to share           | 81. Generous              |
| 58. Lazy                     | 82. No manners            |
| 59. Strong beliefs           | 83. Energetic             |
| 60. Many friends/not many    | 84. Trustworthy           |
| 61. Well-like/not well-liked | 85. Moody                 |
| 62. Fun to be with           | 86. Snobbish              |

- |                                     |                                |
|-------------------------------------|--------------------------------|
| 87. Puts others down                | 111. Cocky                     |
| 88. Uses people                     | 112. Hyperactive               |
| 89. Loving                          | 113. Competitive               |
| 90. Annoying                        | 114. No ethics                 |
| 91. Ignorant                        | 115. Hurts others              |
| 92. Nosy                            | 116. Loyal                     |
| 93. Good personality                | 117. Likes to fight            |
| 94. Open-minded                     | 118. Mean                      |
| 95. Cheerful                        | 119. Treats others well        |
| 96. Doesn't pay attention           | 120. Two-faced                 |
| 97. Arrogant                        | 121. Calm                      |
| 98. Often tired                     | 122. Naive                     |
| 99. No morals                       | 123. Serious                   |
| 100. Gets along with everyone       | 124. Compassionate             |
| 101. Considerate/not<br>considerate | 125. Easy to get along<br>with |
| 102. Respects others                | 126. Kindhearted               |
| 103. Nasty                          | 127. Original                  |
| 104. Sly                            | 128. Dependent                 |
| 105. Boring                         | 129. Romantic                  |
| 106. Wants attention                | 130. Hypocrite                 |
| 108. Good conversationalist         |                                |
| 109. Better than others             |                                |
| 110. Quiet                          |                                |



APPENDIX C  
Word Labeling Task

### Word Labeling Task

Please place each word under the category heading that is most appropriate for describing that word.

#### Categories Available

- |                         |                             |
|-------------------------|-----------------------------|
| A. Responsibility       | E. Emotional Expressiveness |
| B. Intellectual Ability | F. Conceit/Modesty          |
| C. Regardfulness        | G. Friendliness             |
| D. Self-Centeredness    |                             |

#### Word to Place Under the Appropriate Category

- |                           |                     |
|---------------------------|---------------------|
| 1. Intelligent            | 17. Selfish         |
| 2. Cares about others     | 18. Reliable        |
| 3. Bad temper             | 19. Talented        |
| 4. Arrogant               | 20. Lazy            |
| 5. Hardworker             | 21. Ignorant        |
| 6. Good conversationalist | 22. Generous        |
| 7. Self-centered          | 23. Mad             |
| 8. Cries                  | 24. Easy-going      |
| 9. Good student           | 25. Helps others    |
| 10. Shares                | 26. Cocky           |
| 11. Cheats                | 27. Easy to talk to |
| 12. Popular               | 28. Sociable        |
| 13. Greedy                | 29. Lies            |
| 14. Conceited             | 30. Not intelligent |
| 15. Egotistical           | 31. Cheerful        |
| 16. Wants compliments     | 32. Considerate     |

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| 33. Sarcastic                    | 50. Moody                         |
| 34. Fun to be with               | 51. Sensitive                     |
| 35. Shy                          | 52. Stuck-up                      |
| 36. Not smart                    | 53. Kindhearted                   |
| 37. Breaks rules                 | 54. Thoughtful                    |
| 38. Responsible                  | 55. Acts stupid                   |
| 39. Compassionate                | 56. Brags                         |
| 40. Calm                         | 57. Always in a good mood         |
| 41. Happy                        | 58. Has many friends              |
| 42. Doesn't have many<br>friends | 59. Not snobbish                  |
| 43. Trustworthy                  | 60. Friendly                      |
| 44. Understanding                | 61. Makes fun of others           |
| 45. Snob                         | 62. Has to be the best            |
| 46. Good friend                  | 63. Snotty                        |
| 47. Angry                        | 64. Easy to get along<br>with     |
| 48. Smart                        | 65. Doesn't make fun of<br>others |
| 49. Forgiving                    |                                   |

APPENDIX D  
Category Recording Sheet

Category Recording Sheet


APPENDIX E

Anecdote Booklets - Free Response

Booklet 1

Please write first and second choice words which best describe the people in the following anecdotes.

Martha

The teacher gave the class a very easy assignment. Although Martha worked very hard, it took her almost the whole class period to complete. She got most of the answers wrong.

1. \_\_\_\_\_
2. \_\_\_\_\_

Larry

Larry wants to be a professional tennis player. He practices about five hours a day, even on weekends. I've never heard him complain about it once.

1. \_\_\_\_\_
2. \_\_\_\_\_

Carl

Carl was carrying a huge bag of candy. I asked if I could have a piece. He told me to get my own candy.

1. \_\_\_\_\_
2. \_\_\_\_\_

Frannie

Everyone in the school knows Frannie. She is always the first one asked to go to parties, to join clubs, and to organize after-school activities.

1. \_\_\_\_\_
2. \_\_\_\_\_

Tammie

I saw Tammie today and asked her how she was. She smiled and said, "Great. School is going well, my mom's health is better, and I finally found a part-time job."

1. \_\_\_\_\_
2. \_\_\_\_\_

Eric

Eric likes to think up new games. He has come up with many different kinds of games that both children and adults can play.

1. \_\_\_\_\_
2. \_\_\_\_\_

Vicki

One day Vicki and I were working on the school newspaper. She had this funny idea and she and I were laughing about it. All of a sudden she said, "Well, if you want to laugh about it and don't want to work together then I'll just leave." She stormed out of the room, but came back about 15 minutes later as if nothing had ever happened.

1. \_\_\_\_\_
2. \_\_\_\_\_

Harry

My friend Harry almost trembles when he has to meet strangers. He blushes and stammers and can't think of anything to say until he gets to know others pretty well.

1. \_\_\_\_\_
2. \_\_\_\_\_



Paul

While a group of us were sitting around talking, someone brought up the subject of grades. Paul stayed out of the conversation until someone asked him how he was doing. He said that he had a straight A average, but that he wasn't sure that it meant as much as people think. He then started talking about something else.

1. \_\_\_\_\_
2. \_\_\_\_\_

Booklet 2

Please write first and second choice words which best describe the people in the following anecdotes.

Barbara

Barbara only talks to people who are as successful as she is. She ignores everyone else.

1. \_\_\_\_\_
2. \_\_\_\_\_

Gary

Every time I see Gary he is always talking and laughing with someone. He makes it a point to meet new people, and even though I don't know him that well he always says hi when he sees me.

1. \_\_\_\_\_
2. \_\_\_\_\_

Kathy

Kathy asked if she could borrow my new bicycle for a race that she wanted to enter. I said yes. She took very good care of it and returned it as soon as the race was over.

1. \_\_\_\_\_
2. \_\_\_\_\_

Rita

Rita stopped by just as I was beginning to move a large number of books up to my bedroom. She didn't offer to carry any of them up, but sat in the living room while I made several trips up and down the stairs.

1. \_\_\_\_\_
2. \_\_\_\_\_

Alex

Alex would rather stay at home and watch television than go out with a group of people. When he does go out, he keeps to himself.

1. \_\_\_\_\_
2. \_\_\_\_\_

Donna

The teacher gave us a very hard test. Donna finished the test long before the rest of us, and as usual all of her answers were correct.

1. \_\_\_\_\_
2. \_\_\_\_\_

Sue

Last week Sue made dinner for her family. Her brother said that he thought the potatoes were a little too salty. Sue picked up his plate and threw it out the window.

1. \_\_\_\_\_
2. \_\_\_\_\_

Wil

My friend's Uncle Wil, gave a large donation to the school to help pay for the new band uniforms.

1. \_\_\_\_\_
2. \_\_\_\_\_

Jack

I watch my younger brother every day for two hours after school. I wanted to go to the library after school on Tuesday, and Jack said that he would be happy to watch my brother. He never showed up. When I asked him about it, he said that he just forgot, and that he would be there on Thursday. He never showed up again.

1. \_\_\_\_\_
2. \_\_\_\_\_

APPENDIX F

Anecdote Booklets with Checklist

Booklet 1

Please indicate your first and second choice words from the checklist which best describe these people.

Martha

The teacher gave the class a very easy assignment. Although Martha worked very hard, it took her almost the whole class period to complete. She got most of the answers wrong.

1. \_\_\_\_\_

2. \_\_\_\_\_

Larry

Larry wants to be a professional tennis player. He practices about five hours a day, even on weekends. I've never heard him complain about it once.

1. \_\_\_\_\_

2. \_\_\_\_\_

Carl

Carl was carrying a huge bag of candy. I asked if I could have a piece. He told me to get my own candy.

1. \_\_\_\_\_

2. \_\_\_\_\_

Frannie

Everyone in the school knows Frannie. She is always the first one asked to go to parties, to join clubs, and to organize after-school activities.

1. \_\_\_\_\_

2. \_\_\_\_\_

Tammie

I saw Tammie today and asked her how she was. She smiled and said, "Great. School is going well, my mom's health is better, and I finally found a part-time job."

1. \_\_\_\_\_
2. \_\_\_\_\_

Eric

Eric likes to think up new games. He has come up with many different kinds of games that both children and adults can play.

1. \_\_\_\_\_
2. \_\_\_\_\_

Vicki

One day Vicki and I were working on the school newspaper. She had this funny idea and she and I were laughing about it. All of a sudden she said, "Well, if you want to laugh about it and don't want to work together then I'll just leave." She stormed out of the room, but came back about 15 minutes later as if nothing had ever happened.

1. \_\_\_\_\_
2. \_\_\_\_\_

Harry

My friend Harry almost trembles when he has to meet strangers. He blushes and stammers and can't think of anything to say until he gets to know others pretty well.

1. \_\_\_\_\_
2. \_\_\_\_\_

Paul

While a group of us were sitting around talking, someone brought up the subject of grades. Paul stayed out of the conversation until someone asked him how he was doing. He said that he had a straight A average, but that he wasn't sure that it meant as much as people think. He then started talking about something else.

1. \_\_\_\_\_
2. \_\_\_\_\_



## Checklist

1. Selfish
2. Cries
3. Bad temper
4. Cautious
5. Creative
6. Anxious
7. Unreliable
8. Cheats
9. Good
10. Popular
11. Tough
12. Untalented
13. Conceited
14. Generous
15. Nice
16. Hardworking
17. Jealous
18. Modest
19. Friendly
20. Mean
21. Breaks rules
22. Intelligent
23. Sarcastic
24. Happy
25. Unsociable
26. Courteous
27. Not helpful
28. Cruel
29. Gross
30. Responsible
31. Romantic
32. Unintelligent
33. Broadminded
34. Shy
35. Adventurous
36. Moody

Booklet 2

Please indicate your first and second choice words from the checklist which best describe these people.

Barbara

Barbara only talks to people who are as successful as she is. She ignores everyone else.

1. \_\_\_\_\_
2. \_\_\_\_\_

Gary

Every time I see Gary he is always talking and laughing with someone. He makes it a point to meet new people, and even though I don't know him that well he always says hi when he sees me.

1. \_\_\_\_\_
2. \_\_\_\_\_

Kathy

Kathy asked if she could borrow my new bicycle for a race that she wanted to enter. I said yes. She took very good care of it and returned it as soon as the race was over.

1. \_\_\_\_\_
2. \_\_\_\_\_

Rita

Rita stopped by just as I was beginning to move a large number of books up to my bedroom. She didn't offer to carry any of them up, but sat in the living room while I made several trips up and down the stairs.

1. \_\_\_\_\_
2. \_\_\_\_\_

Alex

Alex would rather stay at home and watch television than go out with a group of people. When he does go out, he keeps to himself.

1. \_\_\_\_\_
2. \_\_\_\_\_

Donna

The teacher gave us a very hard test. Donna finished the test long before the rest of us, and as usual all of her answers were correct.

1. \_\_\_\_\_
2. \_\_\_\_\_

Sue

Last week Sue made dinner for her family. Her brother said that he thought the potatoes were a little too salty. Sue picked up his plate and threw it out the window.

1. \_\_\_\_\_
2. \_\_\_\_\_

Wil

My friend's Uncle Wil, gave a large donation to the school to help pay for the new band uniforms.

1. \_\_\_\_\_
2. \_\_\_\_\_

Jack

I watch my younger brother every day for two hours after school. I wanted to go to the library after school on Tuesday, and Jack said that he would be happy to watch my brother. He never showed up. When I asked him about it, he said that he just forgot, and that he would be there on Thursday. He never showed up again.

1. \_\_\_\_\_
2. \_\_\_\_\_

## Checklist

- |                 |                   |
|-----------------|-------------------|
| 1. Selfish      | 19. Friendly      |
| 2. Cries        | 20. Mean          |
| 3. Bad temper   | 21. Breaks rules  |
| 4. Cautious     | 22. Intelligent   |
| 5. Creative     | 23. Sarcastic     |
| 6. Anxious      | 24. Happy         |
| 7. Unreliable   | 25. Unsociable    |
| 8. Cheats       | 26. Courteous     |
| 9. Good         | 27. Not helpful   |
| 10. Popular     | 28. Cruel         |
| 11. Tough       | 29. Gross         |
| 12. Untalented  | 30. Responsible   |
| 13. Conceited   | 31. Romantic      |
| 14. Generous    | 32. Unintelligent |
| 15. Nice        | 33. Broadminded   |
| 16. Hardworking | 34. Shy           |
| 17. Jealous     | 35. Adventurous   |
| 18. Modest      | 36. Moody         |