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PERSON PERCEPTION ACCURACY IN AGGRESSIVE, WITHDRAWN, AND NORMAL 10 AND 14 YEAR-OLD BOYS

by

Seymore Thomas Hays III

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in

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Abstract

Methodological and conceptual advances in adult person perception studies have assisted researchers in clarifying adult impression formation and person perception accuracy. In this study, these methodological and conceptual advances were utilized to help understand impression formation and accuracy issues in children and adolescents. Specifically, models of dispositional judgments (act frequency, attribution, and conditional) were tested in order to better understand children’s and adolescents’ judgment processes, to clarify earlier developmental findings in the person perception literature, and to assess the relation between children’s and adolescents’ person perception accuracy with recent adult novices and experts. Of particular interest was the relationship between accuracy and the subjects’ psychopathological categorization (aggressive, withdrawn, and normal). Sixty-six children and adolescents were used in a 2 x 3 x 2 mixed factorial design. Dispositional category of subject group (normal, aggressive, and withdrawn) and age of subject (children and adolescents) varied between subjects, and type of target (intact and inverse) was a within subjects factor. Children and adolescents viewed a videotape which consisted of several scenes and were asked to observe the behavior of two target children. Although the target children displayed the same “acts,” their acts occurred in response to different social situations. The “intact” target responded to a range of social situations the way actual aggressive children tend to respond. The “inverse” target displayed the same frequency of behavior, but the pattern of responses across situations was disrupted. In situations in which aggressive children tend to be most aggressive, the inverse target was least aggressive. In situations in which aggressive children tend to be least aggressive, the inverse target was most aggressive.
The findings from this research support the hypothesis that children and adolescents use contextual information in their judgments and are sensitive to the organization of behavior. Children and adolescents judged the targets to be different and were able to recall more accurately the pattern of behavior for the ecologically representative (intact) target than for the inverse target. Whereas aggressive subjects were not able to detect aggression more readily or recover the pattern of behavior for aggression more accurately for the intact target, aggressive subjects, as expected, had the most difficulty recovering the pattern of behavior for the inverse target. The pattern of errors and resulting differences in judgment suggest that aggressive adolescents may have specialized information concerning aggressive behavior, but that this prior information may interfere or limit their judgment processes. Given that none of the three models of dispositional judgments advanced can fully account for the findings an alternative model is presented.
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CHAPTER 1: INTRODUCTION

The relationship between social knowledge and social behavior has been studied extensively during the past century. Psychologists from several fields have tried to explain how humans perceive others. For example, social psychologists have examined how people make dispositional inferences, how they assimilate or ignore information in making causal attributions, and how they predict future behavior (Funder, 1987; Swann, 1984; Wright & Mischel, 1987). Personality theorists have studied the nature of dispositions and how people perceive and misperceive them (e.g., Buss & Craik, 1983; Mischel, 1968). In addition, an extensive literature in clinical psychology has examined the utility of trait constructs and dispositional categories in formal personality assessment (e.g., Achenbach & Edelbrook, 1986; Meehl, 1954).

Historically, the person perception literature appears to have evolved through three major phases. Early research was concerned largely with verifying the existence of traits and the usefulness of dispositional constructs (e.g., Allport & Vernon, 1933; Hartshorne & May, 1927). For example, May and Hartshorne (1928) tested the validity of the trait construct “honesty” by assessing children’s tendency to cheat in different test situations. Their evidence, which showed that children were not consistent in their honesty or cheating from one situation to the other, appeared to challenge the commonly held view that traits were a consistent and stable phenomenon within the individual. This and other evidence of the low cross-situational consistency of behavior led others to question whether trait terms, as used by lay, social observers were closely linked to actual consistencies in target behavior (see Mischel, 1968).

Evidence of inaccuracies in person perception results led to a considerable body of literature which examined the sources of people’s inaccuracy in social judgment (e.g.,
Chapman & Chapman, 1967; Jones & Harris, 1967; Jones & Nisbett, 1972; Nisbett & Ross, 1980; Zandy & Gerard, 1974). This second phase of person perception research focused largely on the situations or conditions in which observers made errors. This was, in part, because their errors had real-world significance. In addition, these errors revealed something about underlying judgment processes.

Contemporary research on person perception has begun to explore the conditions under which accuracy can be achieved. This third phase of person perception work examines conditions under which observers’ dispositional judgments are useful in summarizing or predicting targets’ actual behavior (e.g., Swann, 1984). For example, Wright and Dawson (1988) identified conditions under which observers’ dispositional judgments can be highly predictive of target’s actual behavior, at least in some dispositional domains (e.g., aggression). Other work has begun to identify conditions under which people use contextual cues to help them make more accurate dispositional judgments: Shoda, Mischel, and Wright (1989) found that observers were more accurate in predicting aggression when given explicit contextual information than they were when given situation-free information. In general, this and related work (e.g., Swann, 1984; Funder, 1987, 1991) has begun to qualify some of the earlier conclusions about people’s judgment flaws and to clarify the conditions in which observers can achieve reasonable, and sometimes excellent, levels of accuracy.

To date, most of the empirical work has focused on adult person perception and the conditions under which adult accuracy can be achieved. In the present research, I extend previous efforts by examining the connections that mediate the accuracy of person perception in children. The use of improved methodology allows me to examine conditions under which children’s accuracy may be enhanced and to clarify the role of contextual information in impression formation. Unlike previous developmental work
on person perception that relied primarily on interview techniques, I create experimental conditions that make it possible to expose subjects to targets whose behavioral properties are carefully controlled. Second, unlike some previous research in which artificial and/or unrealistic targets were used, this present research used ecologically representative targets based on hours of actual observation who display realistic behavior within the experimental paradigm. Finally, these targets were specifically designed to test alternative models of dispositional judgments.

To understand more critically the methodology used in this research, I will first present several models of dispositional judgments and then review methodological issues and theories involved in the study of accuracy. Following this background on person perception and judgment accuracy, I will explain how this information applies to the current research. Specifically, I will discuss the relevance of recent findings in the expert–novice differences in social judgment and their relation to my research on developmental differences in the accuracy of person perception. Finally, I will critique the child person perception literature and develop hypotheses based on the recent theoretical and empirical evidence from the adult studies and apply them to children.

Models of Dispositional Judgments

Several models are available to explain dispositional judgments and the conditions under which dispositional attributions are justified. These include act frequency, attribution, and conditional models of dispositional judgments. These models vary in how they incorporate situational variables, which is a central interest in the present research. Below, I will briefly review these models and examine their implications for research on the role of context in the judgment process.
The Act Frequency Approach

The act frequency approach (Buss & Craik, 1983) is a model of behavioral dispositions which asserts that dispositional judgments are based on overall frequencies with which relevant behaviors occur. In this model, dispositions function as natural cognitive categories with acts as members (Buss & Craik, 1983). In its simplest form, the act frequency model states that dispositional judgments are based on the pattern of overall frequency or “act trends,” that is, the frequency of relevant behaviors displayed over some period of observation. According to Buss and Craik (1983) this overall frequency or “act trend” is the fundamental unit of analysis in personality research. For example, over a period of one week, suppose person A exhibits 6 acts of dominance, whereas person B displays 20 acts of dominance. Person B would be judged to be dominant and would be predicted to display dominant behavior in the future.

The act frequency model has been used to study a variety of dispositions including dominance, aloofness, gregariousness, extraversion, and introversion. A typical method for these studies is to use two procedures to assess dispositions: act nominations and prototypicality ratings. For example, to understand dominance, Buss and Craik (1983) asked undergraduates to think of the three most dominant males/females they know and write down five behaviors which exemplify dominance (act nomination). Judges would then rate each of the described acts for the dispositional construct dominance. These acts were then ranked hierarchically from most dominant to least to establish the prototypicality rating for dominance. These acts can then be compared and contrasted to other acts (e.g., submissiveness, introversion, etc.). These acts can also be examined in terms of the acts’ internal structures or compared to self- or other- observed behavior.

One of the major criticisms leveled against the act frequency model is that it does not sufficiently incorporate contextual references (Block, 1989). As Buss and Craik
(1983) stated, “In assessing individuals on personality disposition, act frequency analysis
sums displays of prototypical acts without regard for attributions of causality to person or
situation” (p. 122). In effect, dispositional judgments are developed by aggregating
behaviors over time with little attention to the situation in which the behavior occurs. As
a result, two children could be judged equally aggressive if they displayed the same
frequency of hitting and teasing, even though one child was responding to praise while
the other was responding to provocation. In essence, this model does not deal explicitly
with the high cross-situational variability often observed in behavior (see Mischel,
1973). Block (1989) also argues that this approach is descriptive and not explanatory,
leaving out a means of organizing the observations and “ignores the explanatory
endeavor of scientific personality psychology” (p. 244).

In addition to his conceptual criticisms, Block (1989) raises methodological
concerns with the act frequency approach. Central to this methodological critique is that
the act frequency model does not study “acts” or directly observed behaviors. Instead,
this approach relies on retrospective self-report in which subjects rate the applicability of
positively phrased statements. The statements are then summed to give a “multiple–act
criterion” or “act trend.” Block (1989) suggests that direct observation be incorporated
into the methodology or that the methodology outlined incorporate the rigor of scale
development.

Attrition Theory

Attrition theory (see Heider, 1958; Jones & Davis, 1965; Kelley, 1967) can be
seen as an approach to dispositional judgments which is explanatory and is concerned
with the process by which causality is assessed by an observer. Through this analysis of
the causal process, the perceiver makes dispositional judgments about the world around
him/her (Shaw & Constanzo, 1982). The resulting judgments can be categorized as
either person attributions or entity attributions. Person attributions deal with inferences that a target’s behavior is caused by an internal disposition, whereas entity attributions deal with inferences that a behavior is caused by some external object.

At its core, Kelley’s (1973) covariation model of attribution posits that judgments are or should be developed through three types of information: consistency, distinctiveness, and consensus (Kelley, 1967, 1973). “Consistency” relates to the frequency of a given behavior shown by the target towards the same entity over occasions. Using aggressive behavior as an example, high consistency would occur when the target child is aggressive toward a peer on several occasions, over time, whereas low consistency would occur when that child is aggressive towards that peer on some occasions but not others. “Distinctiveness” refers to the degree to which the target displays the same behaviors to multiple entities. Again using aggressive behavior as an example, low distinctiveness would occur when the target child behaved aggressively towards a number of different entities, whereas high distinctiveness would occur when that child behaved aggressively towards one entity, but not others. Finally, “consensus” is determined by others’ response to the same entity. Using aggressive behavior as an example, low consensus would occur when only a few people behave aggressively towards a particular entity, whereas high consensus would occur when most or all other people behave aggressively towards the same entity. For a disposition to be attributed, the ideal pattern of information that a target actor would display would be high consistency, low distinctiveness, and low consensus. For example, for a child to be labeled aggressive, that child would have to show aggressive behavior towards others over time (high consistency), show aggressive behavior in a number of situations (low distinctiveness), and show aggressive behavior towards a target that others do not behave aggressively towards (low consensus).
By varying the three sources of information (consistency, consensus, and distinctiveness), McArthur (1972) found general support for Kelley's attributional model. In her study, McArthur presented the subject with a behavioral description followed by three statements concerning consistency, consensus, and distinctiveness. For example, "John laughed at the comedian." "John always laughs at this comedian" (high consistency). "Other people do not laugh at this comedian" (low consensus). "John also laughs a lot at other comedians" (low distinctiveness). The results of this study showed that by varying these three types of information, subjects' dispositional judgments did in fact change. However, the results of this study also showed that subjects do not use these three sources of information equally, with consensus being used less than either distinctiveness or consistency information. This underutilization of consensus information, dubbed the "fundamental attribution error," has been identified as a critical difference between how observers should use stimulus information in making dispositional attributions and how they actually use such information.

This use of or failure to use consensus information highlights key questions about covariation and related models of attribution. As mentioned above, the fundamental attribution error refers to the underutilization of consensus information, by definition one of the key pieces of information observers ought to use in making dispositional judgments. From the outset, then, there is a bifurcation between the normative model (i.e., what an ideal observer should do) and the descriptive model (i.e., what people actually do). In this sense, covariation models of attribution, even if they are normatively defensible, do not provide an adequate descriptive account of dispositional judgment. If the formal model were stripped of consensus information, it would in essence become similar to the act frequency model and, as such, subject to much of the same criticisms.
A second critical issue is that attribution theory treats different dispositional domains as equivalent. The model posits that consensus, consistency, and distinctiveness information is processed similarly regardless of dispositional domain. Thus, domains such as dominance, withdrawal, or friendliness are treated the same without dealing explicitly with possible differences over these domains. Therefore, observers try to equally maximize their goals and accuracy in all domain areas irrespective of a domain's adaptive need or importance.

Finally, most attribution research has used explicit consensus, consistency, and distinctiveness information in its methodology as opposed to showing behavior in its full context. In addition, this area of research also tends to study single act categories instead of studying multiple dispositional domains. For example, referring back to McArthur's (1972) study involving sense of humor and comedians, only one domain was examined with only consensus, consistency, and distinctiveness information presented. This study did not examine attributional process in response to behavior presented in full context, nor did it examine multiple domains.

*The Conditional Model*

The conditional model (e.g., Allston, 1975; Wright & Mischel, 1987) asserts that dispositional statements refer to "if-then" relations between contexts and behaviors. Dispositional attributions summarize patterns of "if-then" relationships which connect categories of situations to categories of behaviors. For example, a good example of an aggressive child might be a child who behaved aggressively when provoked or threatened, but not when when praised. A child who displayed the same frequency of aggressive behaviors, but in response to different situations might not be as good an example of an aggressive child. For example, a child who displayed aggressive behavior in response to praise might be labeled maladjusted or crazy rather than aggressive. As
can be seen from the above example, goodness of fit to a dispositional construct will vary as the situation–behavior relations vary (Wright & Mischel, 1987). For example, Wright and Mischel (1987) found that children who were judged to be overall most aggressive displayed physical aggression at the same rate as children judged to be much less aggressive when in a non–threatening camp situation such as fishing or swimming. However, when in situations which demanded more competency such as tolerating frustration or dealing with adult or peer conflict, children judged to be the most aggressive displayed significantly more physical aggressive acts than did other less aggressive children.

Recent person perception studies support this notion that adults are indeed sensitive to situation–behavior relations (Wright & Mischel, 1987; Wright & Mischel, 1988) and that certain patterns of behavior across situations are more likely to elicit dispositional attributions. Shoda et al. (1989) demonstrated that adults were better able to predict individual differences in children's aggressiveness when presented with specific contextual information. Shoda et al. (1989) also found that situational information influenced observers' impression formation. For example, while keeping the frequency of the observed person's or target's behavior constant, Shoda et al. (1989) created several experimental conditions, including "intact" (behavior occurring in its natural condition) and "inverse" (behaviors remained the same, but occurred in conditions in which it normally does not). Thus, the "intact" targets closely resembled the actual pattern of children's behavior, whereas the "inverse" target displayed the same behaviors, but in the wrong situations. Shoda et al. (1989) expected inferences to change as the natural antecedent–behavior relations were violated. Results showed that subjects' dispositional judgments of targets' aggressiveness were highly predictive of targets' actual overall aggressiveness in the intact condition, but not in the inverse condition. Moreover, their
results specifically showed how context-behavior relations influenced subjects' dispositional judgments. For example, observers described the inverse targets as qualitatively different (e.g., maladaptive or odd) even though they showed the same rate of aggressive and friendly behaviors.

These results appear to contrast to predictions derived from attribution or act frequency theories. For example, given that the behavioral frequency between the intact and inverse target was held constant, act frequency theory presumably would have predicted no differences in impression formation between the targets. Attribution theory makes, at best, competing predictions with the conditional model. For example, suppose that observers based their judgment of aggression only on “aggressive acts.” In this case, attribution theory would presumably predict that the inverse target would be judged more aggressive than the intact target. This is because the inverse target displayed aggression in situations where most people do not (i.e., consensus is low). On the other hand, if observers based their judgments of aggression both on aggressive acts and non-aggressive (e.g., friendly) acts, then attribution theory presumably would predict little or no difference in the judgments of the two targets. This would be due to the fact that the inverse target displays offsetting low consensus responses: he is aggressive when others are not, but he is also friendly when others are not.

In summary, there are three models which have guided previous work on dispositional judgments. The act frequency model states that dispositional judgments are based on overall frequencies with which relevant behaviors occur, or “act trends.” This model of dispositional judgment does not place much emphasis on situational variances. The attribution model posits that dispositions are based on three sources of information: consistency, distinctiveness, and consensus. However, research has demonstrated that consensus information is underutilized, which gives way to differences between how
observers should and do develop judgments (i.e., fundamental attribution error). Finally, the conditional model states that dispositional judgments refer to "if-then" relations between contexts and behaviors. This model suggests that even though the behavioral frequencies of two targets may be similar, different judgments may be developed in response to differing antecedent conditions.

In the present research, I create specific conditions that are designed to clarify how child observers use, if at all, the relationship between context and behavior in making their dispositional judgments. The stimulus conditions will be closely modeled after the work by Shoda et al. (1989), who manipulated the antecedent conditions, while keeping overall and specific behavior frequencies constant. In this way the present research will clarify the degree to which observers' dispositional judgments are consistent with the act frequency, attribution, or conditional models of dispositions.

*The Return to Accuracy*

Partly in response to Cronbach's (1955) methodological critique of person perception accuracy, research on this topic all but disappeared until the mid 1980's. Cronbach (1955) argued that much more than a single global discrepancy score was needed to understand and measure accuracy. Although Cronbach went on to explain a model for conceptualizing accuracy, most researchers at that time were unwilling or unable to respond to Cronbach's criticisms (Kenny & Albright, 1987). Instead research shifted to the study of the process of impression formation and the so-called judgment "heuristics" involved in the fundamental attribution error and their presumed judgment flaws (see Nisbett & Ross, 1980).

Recent work on models of dispositional judgments raises, once again, fundamental questions about the accuracy of social judgment. In contrast to the "heuristic" literature that predominated in 70's and early 80's, these new models focus more on the conditions...
under which observers can be accurate. For example, the act frequency model posits a close congruence between dispositional judgments and sufficiently broad "act trends." The conditional model posits a close correspondence between certain dispositional judgments and specific if–then relationships between context and behavior.

According to Wright (1989), the recent resurgence in accuracy research is motivated by three factors. One reason for the renewed interest in accuracy includes its practical significance. Although the extensive bias literature suggests that person perception is often flawed and error–prone (Funder, 1987), recent studies suggest that both experts and lay–people can make accurate judgments under certain conditions (see Wright & Dawson, 1988; Dawson et al., 1989). Thus some of the dire conclusions about the errors in clinical judgment may need to be qualified. Secondly, improved methodologies, including improvements in behavior assessment based on observation of behaviors (e.g., Patterson, 1986) have increased measurement reliability, which in turn provides better behavioral information with which to study the relations between judgment and behavior. Finally, as I review next, the resurgence of accuracy research is due in part to progress in defining what an error is. This includes work by Funder (1987, 1991), Kenny and Albright (1987), McArthur and Baron (1983), Swann (1984), and Wright and Dawson (1988).

One conceptual advance in the mid–1980’s was McArthur and Baron’s (1983) ecological theory of social perception. This approach, which drew from Gibson’s (1979) ecological model of visual perception, assumes that social perception serves an adaptive function. That is, certain categories of behavior, such as aggression, may be easier to perceive than, say, withdrawal because this sensitivity enables the observer to avoid harmful situations or consequences. This model also limits the perceived information to objective physical events, eliminating inference. Finally, this ecological approach
assumes that social perception is limited by its environment and that the observer’s goal is not to maximize accuracy, but to summarize and be “good enough” in predicting others’ behaviors.

Similar to the ecological model, Swann’s (1984) pragmatic approach emphasizes that social judgment is constrained by the social environment. Swann argues that social perception takes place in an interpersonal context in which the observer and the target interact. Swann (1984) calls this interaction between the observer and the target “identity negotiation” which becomes the basic process through which accuracy can be measured. Accuracy is therefore defined by Swann as the ability to promote the interaction goals of the perceiver. For example, a child perceiver in its interaction with an aggressive target child is most accurate if he/she is able to negotiate the situation without being adversely effected. The pragmatic approach also limits itself to personal interaction and does not account for social judgments in which the perceiver is not socially or behaviorally engaged.

Funder (e.g., Colvin & Funder, 1991; Funder, 1987; Funder & Colvin, 1988) argues that accuracy must have some point of comparison to determine accuracy and that accuracy cannot be measured simply as variance (errors or mistakes) from a normative model. As a point of comparison he posits two forms of accuracy. The first form of comparison examines agreement between observers, while the second involves the predictive ability of the observer. Funder emphasizes that research must be done with real social stimuli used either in the laboratory, which Funder argues would be difficult, or in the real social environment. For example, Colvin and Funder (1991) used both live interactions as well as videotape interactions to access personality and behavioral predictions by acquaintances and strangers. They found that acquaintances who interacted with targets over time in several situations were better able to predict
personality measures than were strangers, who viewed targets only once from a videotape. This suggests that accuracy is improved with multiple exposures to and in different situations with the targets being observed.

Stemming from Simon's (1956) work on bounded rationality, the bounded rationality model of social judgment (e.g., Wright & Dawson, 1988) attempts to integrate and apply some of Simon's main themes to social judgment. The main premise of this model is that human thinking or rationality is limited or bounded by the situation in which decisions are made and by the computational abilities of humans (Simon, 1957; 1983). This bounded approach is similar to the ecological and pragmatic positions in that they view social judgment as being constrained by the social environment (Wright & Dawson, 1988). That is, observers will not always need to be optimally accurate, but instead may be reasonably accurate or "satisficing" without some adverse effect. This idea that accuracy has an adaptive value also is consistent with the ecological position. For example, it might be adaptive for a child to be more sensitive to aggressive than withdrawn behaviors, or to be more accurate in their judgments of aggressive than withdrawn individuals. In general, the bounded model does not assume optimal conditions, information, abilities, or optimizing goals, as in many normative or "Olympian" models (Simon, 1983).

This bounded position is consistent with the view that social perceivers' sensitivities are behaviorally bounded, being weaker for social behaviors with low adaptive significance. This is in contrast to several other models, such as attribution and act frequency models which make few explicit claims about the dispositional properties that will be easiest or most difficult to perceive. In support of this argument, Wright and Dawson (1988) found that people were more sensitive to the organization of aggressive behavior than they were to withdrawn behavior. Therefore the issue of importance is not
whether observers are accurate, but under what conditions observers are more or less accurate.

In attempting to understand the conditions or situations in which observers can be more accurate, evidence from the expertise literature in non-social domains is informative. That literature suggests that experts consistently demonstrate higher levels of performance than novices (Dawson et al., 1989). Expertise in problem solving has been found in several areas including physics (e.g., Chi, Feltovich, & Glaser, 1981), medical decision making (e.g., Lesgold, 1983), and chess (e.g., Chase & Simon, 1973). Central to these findings is that expertise is highly circumscribed and domain-specific. For example, in Chase and Simon's (1973) study on chess experts, chess masters were better able to recall chess boards than novices when chess pieces were placed in a meaningful pattern. However, when they were placed on the chess board in a random fashion (i.e., not a pattern or board that would be found in a real chess match), chess masters were no better than novices in recalling those boards. This suggests that experts utilize information more efficiently, but only as long as it conforms with the knowledge they have acquired through either experience or similar problems. Other evidence suggests that experts' prior knowledge may interfere with their abilities to perceive and recall patterns that do not meet their prior expectancies (e.g., Rosenhan, 1973; Wright, Delaforcade, & Dawson, 1993). In summary, these findings seem to suggest that expert-novice differences are clearest when the stimuli closely resemble the actual information experts encounter in their domain and the dependent measures are relevant to the experts' knowledge and problem-solving strategies (Dawson et al., 1989).

Similar to experts in non-social domains, expertise in social domains may also be highly circumscribed and domain-specific. However, most social perception tasks may not have detected expertise in social domains either because they treat all judgment
domains alike, expose subjects to very limited information about targets, or display or describe behavior out of context (see Mischel, 1968; Oskamp, 1965).

One expert–novice study in the area of social judgment which incorporated these concerns listed above was that of Dawson, et. al., (1989). This study was designed to examine one dispositional domain, aggression. The study also provided subjects with multiple observations of targets’ behavior and displayed that behavior in context. Using a computer display, expert clinicians and novices were shown three target children. The first target was an intact aggressive child. This target was created using behavioral profiles of actual aggressive children and thus obeyed the "rules of behavior" that actual aggressive children follow. The second target was an inverse target which systematically disrupted the aggressive child's behavioral profile (i.e., the child violated the rules of behavior that actual aggressive children follow). That is, the context of the behavior was reversed from what would have been the expectation. The final target was an invariant target which performed the same number of acts, but the behaviors did not vary over the situations.

Results from Dawson et al. (1989) showed that clinicians were more accurate than novices in their labelling of the intact target and could recall more accurately the pattern of the intact target's behavior. Experts could also recall the patterning of the inverse target's behavior more accurately than did the novices. However, there were no differences between the experts and novices on categorization for the invariant target. In summary, experts' recall was more accurate when the target resembled highly familiar aggressive children and when the target displayed a pattern that was "opposite" to aggressive children. However, experts performed no better than novices when the target's behavior did not vary over situations.
This methodology of Dawson et al. (1989) provides a way to study the role of contextual information and the conditions that mediate the accuracy of observers' judgments in social judgments. However, as with most of the recent theoretical and methodological advances in social judgment and accuracy, no research, to the best of my knowledge, has applied these advances to the study of children's person perception. The present research will attempt to utilize the theoretical and methodological advances of Dawson et al. (1989) in a paradigm with children and adolescents. However, before I begin to detail the current study and predicts specific outcomes, I will present a brief review of the child person perception literature.

Child Person Perception and Dispositional Judgments

Child person perception research tends to resemble its adult counterpart. As a result, much of the work is subject to the same criticisms. However, there are some general findings which will have direct implications for this study. Of most interest to this particular research is the domain of aggression and in that regard special attention will be drawn to children's social judgments surrounding aggression. In this section, I will present the current understanding of child person perception, its developmental impact on social judgment and accuracy issues, as well as the implications of situational factors on these processes.

In general, children tend to develop impressions of others based on interactional terms along the lines of "personal significance" (Yarrow & Campbell, 1963). For example, young children do not perceive withdrawn behavior as maladaptive, while aggressive behavior is perceived as maladaptive (Coie & Pennington, 1976). Aggressive children, arguably, pose much more of a threat and, therefore, it becomes more important for children to be able to adequately perceive aggressiveness. In addition, children report a more organized and complex description of others when there is affective involvement,
particularly when the emotion is negative (Rosenbach, Crockett, & Wapner, 1973; Yarrow & Campbell, 1963).

Findings with younger children show that they tend to make perceptions that are more egocentric and revolve around their own needs (Scarlett, Press, Crockett, 1971). Livesly and Bromley (1967) report that younger children describe people in terms of physical characteristics and specific habits and actions. This was further supported by Barenboim’s (1981) findings that younger children (aged 6–8) in their observations use behavioral comparison such as, “Johnny doesn’t hit like Paul does.” Wright (1989), in his work with adults, suggests this significance can be understood in the context of the perceivers’ adaptive needs. That is, observers will be more sensitive to behaviors which are relevant for the observer than they will be to behaviors which have little significant impact on their lives.

Older children (often defined as adolescents 14–16) show increased complexity in their person perception descriptions and impression formations. Barenboim (1981) found that older children used more “organizing relationships” when developing impressions. That is, adolescents use “if,” “when,” “but,” and “because” more often in their descriptions. This seems to suggest that adolescents are more sensitive to domain-specific conditions. Older children also appear to use more stable dispositions (Livesly & Bromley, 1967) and differentiate the person from his social setting or possessions (Peegers & Secord, 1973).

Barenboim (1981) suggests that children undergo a developmental process towards adult person perception. For example, he found that younger children, at first, frequently make behavioral comparisons, but as they age these comparisons decrease. Children then begin to use psychological constructs to describe others. Finally,
adolescents start to make psychological comparisons when perceiving others. This suggests that inferences play a larger role in person perception as children mature.

As mentioned earlier, research in the child person perception area tends to resemble the adult research paradigms in that most of it is retrospective and does not take place within an interpersonal context. Livesly and Bromley (1973), in their major review of child person perception, lamented that there was no organized research to address the issue of developmental psychology with regard to person perception. A recent review of the literature reveals research which has typically not been situation-specific nor accuracy oriented (e.g., Crombie & Gold, 1983; Furman & Buhrmeister, 1985; Rholes & Ruble, 1986; Sigelman, Carr, & Begley, 1986). Although recent theoretical developments, particularly those of Dodge (1986) and Patterson (1986), have pointed to the importance of context in social cognition and behavioral outcomes, empirical studies on person perception and dispositional judgments appear to have lagged behind.

Research which examines children’s perceptions often studies different types of roles that significant others and the self are involved in (such as sex differences) or asks children to recall impressions. For example, Furman and Buhrmeister (1985) had children rate their relationships with others (such as mother, father, teacher, sibling) on several personality traits such as affection and enhancement of self-worth. These impressions, although noteworthy, do not take into account situational variance, nor do they examine the interactional process of the person and the situation. As in much of the early adult person perception research, highly structured domains are rarely studied, but instead lumped together with the use of global trait descriptors. That is, many areas are typically studied at once such as aggression, introversion, and dominance. Finally, these studies rarely incorporate the use of multiple observations.
As mentioned above, some researchers (e.g., Dodge, 1986; Dodge, Price, Bachorowski, & Newman, 1990; Quiggle, Garber, Panack, & Dodge, 1992; Weiss, Dodge, Bates, & Pettite, 1992) have begun to study the role of context and situational factors as they relate to the development of a social information processing model. For example, by presenting aggressive, depressed, and normal children with either ambiguous or clearly aggressive situations, they found that aggressive and depressed children display a hostile attribution bias. That is, these children are more likely than normal children to perceive and infer ambiguous provocation as intentionally hostile behavior. Although these researchers varied the situations, the situations presented were not varied in a fashion to help understand the role of the situation on children's perceptions outside aggression. For example, Quiggle et al. (1992) varied stories presented to aggressive and depressed children, but did not present stimuli which were non-aggressive, non-rejecting, or prosocial in nature. Finally, this body of literature does not assess accuracy or how children's accuracy between the three groups (aggressive, depressed, and normal) is reflected in their dispositional judgments.

In addition, although these authors (e.g., Dodge et al., 1990; Quiggle et al., 1992) examine children's perceptions in a more systematic fashion, the perceptions elicited are often self-perceptions based on what children would do in certain situations. For example, Quiggle et al. (1992) found that when aggressive, normal and depressed children were read stories in which the child was to pretend that he/she failed, was rejected, or ridiculed, depressed and aggressive children showed a hostile attribution bias.

Given the recent findings that adults' judgments are contextual and domain sensitive and the lack of research examining the role of domains or situations in children's perceptions, three basic unanswered questions exist. First, to what degree do children process contextual cues as adults do in making dispositional attributions?
Second, what is the degree to which use of contextual cues, in making dispositional attributions, increases with age and interpersonal experiences? Finally, what is the degree to which contextual cue usage varies over individual differences. That is, given the research which supports hostile attribution bias, do aggressive and withdrawn youths differ in their use of contextual information when compared with normal youths.

For these reasons the present research attempted to assess developmental and individual differences in children's and adolescents' use of contextual cues in making dispositional inferences. This research differs from previous developmental work in which youths described known peers and thus left contextual cues uncontrolled. In addition, this research differs from previous work by presenting more than one act in one situation by the same target. Finally, unlike much of the previous developmental research in which ambiguous situations were presented and therefore the value and substance of contextual cues unknown, all situations are be well defined. These condition are satisfied by controlling the total frequencies of observed behaviors while presenting different antecedent conditions to these behavioral responses. Therefore, I hope to understand how these situational effects influence the accuracy of recall on observed behavior as well as differences in dispositional judgments.

Current Research

This research examines a methodology for studying children's person perception accuracy, dispositional judgments, and the effects of situations on these judgments. Employing a videotape which presents children acting out various scenes, male child subjects are interviewed to assess their judgment accuracy. Of particular importance to this study is that the children being observed displayed the same behaviors, but in response to differing antecedent events. In this way, this study could begin to clarify the
way children use or misuse information about the relationship between context and behavior.

The basic format of this research will follow that of Dawson et al. (1989) and their use of an aggressive prototype using both an intact and inverse target. An aggressive prototype was used because of the vast knowledge of aggressive behavior within the field as well as allowing for comparisons of findings. Also, given the desire to examine developmental differences and allowing for comparison to other work, this study will use matched aggressive, withdrawn, and normal 10 and 14 year-old children as subjects. The basic predictions will follow the premise of research on expertise in both social and non-social domains: As children acquire more knowledge of the actual organization of behavior with increasing exposure, they will demonstrate both an increased sensitivity to specific dispositional categories as well as a greater ability to reconstruct the patterning of behavior that they have observed in a specific target. By extrapolating findings from Dawson et al. (1989) and the developmental literature on person perception, the following predictions can be made:

Hypothesis 1: Given the importance of contextual factors, children will detect differences between the inverse and intact targets. Specifically, they will judge these target as different and assign different attributes and dispositional categories to the targets. This hypothesis will address key differences between act frequency, attribution, and conditional models. Specifically, the act frequency model would predict no differences between the targets. Attribution theory would make competing predictions, based on how children use consensus information. If little or no consensus information is used, then there would be no differences between the targets. If subjects do use consensus information, the predicted effects depends on how subjects integrate the targets different responses. For example, if only aggressive acts are used in making
judgments of aggression, the inverse target would be judged more aggressive than the intact, since the inverse target displays aggression in low consensus situations. If consensus information is used differentially for aggression or friendliness, the target will be perceived as being either more friendly or more aggressive. Note that in neither case is the intact target judged to be more aggressive than the inverse. By the same reasoning, in neither case is the intact target judged to be more friendly than the inverse. Finally the conditional model would predict that children will perceive the targets as different personalities. Specifically, the intact target would be perceived as more aggressive and more friendly than the inverse.

Hypothesis 2: Since the intact target’s behavioral profile is consistent with the actual organization of behavior for actual aggressive children, and to a lesser degree, for actual non-aggressive children as well, children will recall the intact target’s pattern of behavior more accurately than the inverse target’s behavior pattern since the latter violates the actual organization of behavior for both actual aggressive children, and to a lesser degree, non-aggressive children as well.

Hypothesis 3: To the degree that aggressive children have specialized knowledge about aggressive behavior, aggressive children, particularly compared to normal children, will detect aggression more readily and will be more accurate in recalling the behavioral pattern of the intact target, whose behavior patterns resemble those of actual aggressive children.

Hypothesis 3a: To the degree that aggressive children have specialized knowledge about aggression, these children will have more difficulty recovering the pattern of the inverse target, since that target will violate their expectations of an aggressive child.

Hypothesis 3b: Given that expertise increases with exposure in a given domain, aggressive adolescents will be better at detecting aggression and recovering the
behavioral pattern of the intact target than will their child counterparts. It also follows that aggressive adolescents will also have the most difficulty with recovering the inverse target's behavioral profile.

Hypothesis 4: Similar to earlier person perception research, normal adolescents will use more psychological than behavioral descriptors to describe the "real world" target, while normal children will use more behavioral than psychological descriptors. It will be interesting to note whether or not clinical groups of children and adolescents follow this same pattern.
CHAPTER 2: METHOD

Overview of the Design

A 2 x 3 x 2 mixed factorial design was used. Dispositional category of subject group (normal, aggressive, and withdrawn) and age of subject (children and adolescents) varied between subjects, and type of target (intact and inverse) was a repeated measure. Children viewed a videotape which consisted of several scenes and were asked to observe the behavior of two target children. Although the target children displayed the same “acts,” their acts occurred in response to different social situations. The “intact” target child responded to a range of social situations the way actual aggressive children tend to respond. The “inverse” target displayed the same frequency of behavior, but the pattern of responses across situations was disrupted. In situations in which aggressive children tend to be most aggressive, the inverse target was least aggressive. In situations in which aggressive children tend to be least aggressive, the inverse target was most aggressive.

Subjects

Sixty-six boys, aged 9 to 16 years, participated in this study. They were recruited from a summer residential treatment program as well as public and private schools in the Boston, MA and Hillsboro, NH areas. These boys varied in their ethnic backgrounds and Table 1 provides a breakdown of the ethnic groups. The sixty-six boys were selected from a larger pool of recruited boys and placed into one of six groups.

Group placement was determined by age and score on the Teacher Report Form of the Child Behavior Checklist (CBCL). Based on age (children or adolescent) and CBCL profile (normal, aggressive, and withdrawn), each boy was placed into one of six groups. The two age groups were 9–11 years for the children’s group and 12–16 years for the adolescent group. Assignment to the subject group was based on CBCL scores using the
clinical elevation norms established for each factor on the CBCL–TRF. To insure good examples of aggressive and withdrawn children, only those children who scored high only in one of the categories, aggression or social withdrawal, were used. That is, for aggressive adolescents, subjects had an average rating on the aggression scale of at least 1.2, while aggressive children had an average rating of 1.1. Withdrawn adolescents had an average rating of at least 1.0 on the social withdrawn scale, while children had an average rating of at least 0.82. These scores for the clinical groups reflect cutoff ratings in the clinically significant range, which is greater than the 98% or a T score greater than 70, for both aggression and social withdrawal. These clinical cutoffs were established by Achenbach and Edelbrook (1986) for the CBCL–TRF. Normal children were defined by having no elevated scores above the clinical cutoff in any category on the CBCL–TRF.

Table 1

<table>
<thead>
<tr>
<th>Ethnic Background by Subject Group</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Subject Group</td>
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<td></td>
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<tr>
<td>Aggressive</td>
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<tr>
<td>Withdrawn</td>
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<tr>
<td>Normal</td>
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It should be noted that within the clinical groups of subjects additional behavior coding categories were in the clinical range on the CBCL–TRF for some of the subjects. That is, additional behavioral categories were above the 98% or had a T score greater than 70. Specifically, the categories of "Immature", "Anxious", "Unpopular", "Self-Destructive", "Obsessive–Complusive", and "Inattention" were represented. As
shown in Tables 2 and 3, many of these subjects had multiple behavior category elevations.

Table 2

Frequency of Elevated Behavioral Categories for Aggressive 10 and 14 yrs Subjects

<table>
<thead>
<tr>
<th>Subject Group</th>
<th>Behavior Category</th>
<th>Immature</th>
<th>Anxious</th>
<th>Unpopular</th>
<th>Self-Destructive</th>
<th>Obsessive-Compulsive</th>
<th>Inattention</th>
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<tbody>
<tr>
<td>Aggressive14 yrs</td>
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<td>11</td>
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<td>x</td>
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<tr>
<td>Totals</td>
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<td>9</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>1</td>
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</table>

| Aggressive10 yrs |                   |          |         |           |                 |                      |            |
| Ss 1            |                   |          |         |           |                 |                      |            |
| 2              |                   |           |         |           |                 |                      |            |
| 3              |                   |           |         |           |                 |                      |            |
| 4              |                   |           |         |           |                 |                      |            |
| 5              |                   |           |         |           | x               |                      |            |
| 6              |                   |           |         |           | x               |                      |            |
| 7              |                   |           |         |           | x               | x                    |            |
| 8              |                   |           |         |           |                 |                      |            |
| 9              |                   |           |         |           |                 |                      |            |
| 10             |                   |           |         |           | x               |                      |            |
| 11             |                   |           |         |           |                 |                      |            |
| Totals         |                   | 2        | 0       | 2         | 5               | 1                    | 0          |
Table 3
Frequency of Elevated Behavior Categories by Withdrawn 10 and 14 yrs Subjects

<table>
<thead>
<tr>
<th>Subject Group</th>
<th>Behavior Category</th>
<th>Withdrawn 14 yrs</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Immature</td>
<td>Anxious</td>
<td>Unpopular</td>
</tr>
<tr>
<td>Ss 1</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>2</td>
<td>x</td>
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<td>Totals</td>
<td>7</td>
<td>4</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Subject Group</th>
<th>Behavior Category</th>
<th>Withdrawn 10 yrs</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Immature</td>
<td>Anxious</td>
<td>Unpopular</td>
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<td>Ss 1</td>
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Materials

Child Behavior Checklist.

The Teacher Report Form of the Child Behavior Checklist (Achenbach & Edelbrook, 1986) was used to determine subjects' dispositional category. Specifically, "socially withdrawn" and "aggressive" narrow-band dimensions were employed to determine group placement. The CBCL–TRF is a standardized checklist which has been used in a wide variety of settings for both clinical and research purposes. This 118-item checklist was standardized by Achenbach and Edelbrook (1986) on 1,100 randomly selected pupils and results from factor analytic studies produced two wide-bands with eight narrow-band dimensions. The two wide band dimensions are Internalizing and Externalizing. The eight narrow band dimensions for boys are: Aggressive, Nervous–Overactive (ages 6–11), Inattentive, Unpopular, Self–Destructive, Obsessive–Compulsive, Immature (ages 12–16), Social Withdrawal, and Anxious. Separate scoring forms are used for girls and boys as well as latency and adolescent aged children. Test–retest reliability for a one week period was \( r = .89 \) and item intra–class correlations were all greater than \( r = .90 \).

The CBCL was administered both on an individual and group basis, depending on the location of the children to be assessed. Group administration occurred at Wediko Children’s Services. Counselors throughout the residential program were assembled and each counselor was asked to complete two checklists on two different children in their living group. Individual administration occurred in the public schools. Once an informed consent was obtained from a child and his parent(s), a teacher was asked to complete a checklist and return it to the researcher via public mail. Most teachers completed two checklists on children in their classroom, while one teacher completed three. Both teachers and counselors completing the questionnaire first completed
informed consent procedures and then filled out the questionnaires according to the standardized instructions. Once completed, checklists were scored by calculating means for each dimension based on the ratings for each of the behavioral items within a specific dimension.

*Peabody Picture Vocabulary Test–Revised (PPVT–R).*

The PPVT–R (Dunn & Dunn, 1981) was used to estimate each child’s verbal intelligence. This assessment of intelligence was done to control for intelligence across the six groups. It was unknown whether or not intelligence would impact a child’s ability to make social judgments or increase accuracy.

The PPVT–R is a 175–item vocabulary test in which subjects choose the correct pictorial response to a word read verbally. Subjects are shown a plate with four pictures. The examiner then reads a word and the subject must correctly state or point to the picture corresponding to the word. I.Q. is determined by basal and ceiling scores and the number of errors within that range. The PPVT–R can be administered to children ranging in age from 2.5 years and up.

Dunn and Dunn (1981) report that median split-half reliability for the PPVT–R was .81 for children under the age of 18 years. Test–retest reliabilities for children under the age of 18 years were .82 for immediate retest and .78 for delayed retest. Criterion validity studies show that the PPVT–R correlations ranged from .64 to .69 for comparison with age related Wechsler Vocabulary subtest and .72 with the Stanford–Binet Vocabulary subtest. Overall criterion validity correlations for the PPVT–R were .62 for the Stanford–Binet, .64 for the WISC, .72 for the WAIS, and .58 for the WPPSI.

The PPVT–R was administered by trained experimenters after exposure to the experimental procedure. Children at Wediko were assessed several days following the
participation in the experimental procedure, while children recruited at individual schools were assessed immediately following their participation in the experiment. Standard administrative and scoring procedures, as contained in the PPVT–R manual, were followed.

*Construction of the Videotape Scenarios*

The stimulus materials for this project involved a presentation of vignettes of social interaction sequences on videotape. These vignettes or frames consisted of a sequence of behavioral events which might take place in a school. Each frame consisted of specific behavioral information with two basic components: (1) an antecedent actor, adult or child, acting out an antecedent event and (2) a target child, intact or inverse, behaviorally responding to the antecedent event.

*Behavioral Observations Used to Create the Targets*

The construction of these frames was similar to that used in previous research (see Dawson et al., 1989). The original behavioral information used to create the vignettes was collected using real examples of aggressive children attending Wediko Children’s Services summer residential treatment program for emotionally disturbed children for a study done by Wright & Mischel (1987). Based on an hourly observation system of children engaged in a variety of activities, six boys (aged 10–12 years) were selected from the pool of children as good examples of an aggressive child. These observations were performed consistently throughout the day during 40–minute activity periods. Counselors performed these observations by recording behavioral events, who the observed child was interacting with, and behavioral responses which fell into one of four categories: physical aggression, verbal aggression, withdrawal, and prosocial. These six children chosen as good examples of aggressive children were chosen based on their having the highest means on both verbal and physical aggression. These boys all scored
at or above the 85th percentile of aggressiveness. The scenes ultimately used in this study were similar to the ones used in Dawson et al. (1989), which consisted of peer or adult events followed by a behavioral response.

**Antecedent or Event Categories.** There were four types of antecedent conditions used in this video: peer positive, peer negative, adult positive, and adult negative. The peer positive event consisted of a boy initiating friendly behaviors or compliments. The peer negative event showed a boy teasing, threatening, or provoking the target child. Similarly, the adult conditions used adult actresses to play the role of female teachers and present either positive or negative behavior toward the target. The adult positive antecedent condition consisted of the teacher praising, complimenting, or encouraging the child, while adult negative event showed the teacher punishing, scolding, or giving the child a time out.

**Behavioral Response Categories.** Similar to the targets in Dawson et al. (1989), the target child responded to these events in one of four response categories. These responses included physical aggression, verbal aggression, withdrawal, or prosocial behaviors. Physical aggression was defined as hitting, pushing, or kicking, while verbal aggression was defined as teasing, swearing, or threatening. Withdrawal was defined as moving away from the interaction or isolating oneself. Finally prosocial behavior was defined as friendly behaviors such as complimenting or joining in a game.

**Antecedent–Response Scenes.** Each of these events, an antecedent and behavioral response category were combined to create each scene. That is, each antecedent–response scene shows first an antecedent event followed by a behavioral response. The first set of antecedent–response scenes constructed was designed to replicate the antecedent by behavioral response pattern of a prototypical aggressive child labeled the “intact” target. A second set of antecedent–response scenes was then
developed to create the opposite or inverse of a prototypical aggressive child, the “inverse” target.

Construction of Videotape Targets

Intact target. The actual behavior frequencies of the intact target used in the video were determined by the mean response probability, across all six aggressive boys, of a particular behavioral response given a particular antecedent events. That is, based on actual behavioral observation for each one of the six aggressive boys, the probability of a given behavior given a specific antecedent event was measured. These antecedent by behavioral response probabilities were then averaged across the six boys. These probabilities were then translated into behavioral frequencies based on six behavioral responses for each antecedent condition. Therefore, for each antecedent condition (peer positive, adult positive, peer negative, and adult negative) there are six behavioral responses for a total of twenty-four antecedent–response scenes. Thus for one of the antecedent conditions, such as peer negative, the actual number of responses that was seen by the subject was (0) prosocial, (1) withdrawal, (1) physical aggression, and (4) verbal aggression. Table 4 shows the behavioral frequencies of all the behavioral categories by antecedent event for the intact target.

Table 4
Response Frequencies for the Intact Target

<table>
<thead>
<tr>
<th>Antecedent Conditions</th>
<th>Behavioral Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prosocial</td>
</tr>
<tr>
<td>Peer Positive</td>
<td></td>
</tr>
<tr>
<td>Peer Negative</td>
<td></td>
</tr>
<tr>
<td>Adult Positive</td>
<td></td>
</tr>
<tr>
<td>Adult Negative</td>
<td></td>
</tr>
</tbody>
</table>

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Inverse Target. The inverse target was developed by reversing the positive with the negative antecedents while keeping the behavioral responses constant. That is, positive antecedent conditions were matched with the aggressive target’s behavioral responses to the negative antecedent conditions and similarly negative antecedent conditions were paired with the aggressive target’s behavioral responses to positive antecedent conditions.

For example, using the peer negative antecedent condition in the inverse target, subjects saw (6) prosocial, (0) withdrawal, (0) physical aggression, (0) verbal aggression responses. Table 5 shows the behavioral frequencies of all the behavioral categories by antecedent event for the inverse target.

Table 5
Response Frequencies for the Inverse Target

<table>
<thead>
<tr>
<th>Antecedent Conditions</th>
<th>Prosocial</th>
<th>Withdrawal</th>
<th>Physical Aggression</th>
<th>Verbal Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Positive</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Peer Negative</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Adult Positive</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Adult Negative</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Videotaping Procedures

Each target was seen on the video for 24 frames (4 antecedents x 6 behavioral responses) for a two target total stimulus presentation of 48 frames. Each frame lasted approximately 15 seconds followed by a blank screen for 5 seconds. The order of frame presentation was the same for all children, with that order determined by a selection process which controlled for an even presentation of the two targets, the number of positive vs. negative antecedent conditions, and adult vs. child antecedent actors.
Child and adult actors were hired to make the stimulus material (videotape). Each scenario or frame consisted of the target child and actor acting out an antecedent-behavior response scene in a classroom setting. For example, one situation might take place in music class with a peer telling the target child that he sings like a little girl. The target child then responds to this antecedent by telling the actor that, “You are a stupid jerk.” This is an example of a peer negative antecedent with a behavioral response by the target child of verbal aggression (see Appendix 1 for all vignette descriptions).

A total of six actors were used: (2) target children, (2) additional children, and (2) adults with the latter four actors being for the presentation of antecedent conditions. The appearance of the antecedent actors were counterbalanced such that one particular child or adult is not associated with either all positive or negative antecedents. All child actors were white males aged 10–12 years–old with adult white female actors 24–26 years–old. These actors were kept constant to control for race and sex variables in the presentation of the stimulus material. To insure the realism of a school environment, all of the adult actors were special education teachers familiar with classroom protocol.

Pretesting the Videotape

Extensive pretesting was performed to insure good examples of the desired behaviors and antecedents. Undergraduates rated both the script and video at different points in production. Initially, undergraduates rated scripts of 29 antecedent-behavior response frames. These ratings were performed on the antecedents and behavioral responses in isolation as well as in full context. All ratings were performed using a 7-point scale (see Appendix 2 for rating protocols). For each antecedent condition, ratings were obtained for positive and negative (child antecedent conditions) or praise and punish (adult antecedent conditions). Similarly, behavioral responses were also rated.
on each of the four behavioral response categories (physically aggressive, verbally aggressive, withdrawal, and prosocial). All ratings were performed using a 7-point scale (see Appendix 1 for rating protocols). To insure good examples of the antecedent–behavioral response frames, each of the rated items then needed to meet two criteria which included: 1) At least 3.5 average rating in the area in which the condition was designed to represent and 2) no higher than an average of 2 on the other areas.

From these 29 frames, the best 24 frames were videotaped into the 48 frames used in the experimental procedure. These 48 frames (24 per target) were then rated by additional undergraduates (n = 36). As with the ratings for the scripts, ratings were obtained for the antecedents and behavioral response in isolation as well as in full context. Similarly, each of the rated items needed to meet the two criteria set for the script version of the rating task. Table 6 shows the means for each behavioral category for both the inverse and intact target. Table 7 shows the means for each antecedent category for both the intact and inverse targets.

Table 6
Mean Scene Ratings for each Behavioral Response Category by All Behavioral Response Categories for the Intact and Inverse Targets.

<table>
<thead>
<tr>
<th>Rating Category</th>
<th>Intact Target</th>
<th>Inverse Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical Aggression</td>
<td>Verbal Aggression</td>
</tr>
<tr>
<td>Prosocial</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>3.83</td>
<td>0.00</td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>0.00</td>
<td>4.47</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
**Procedure**

All children participated in the three phases of the experimental procedure, with all phases conducted on an individual basis. First, the task was explained to the subject and he was given informed consent materials. Subjects were asked to watch a videotape about scenes they might see in school. They were instructed to pay particular attention to the two target children (Paul & Dan) and be ready to answer some questions about these children following the tape. After completion of the stimulus presentation, which lasted approximately 13 minutes, children were interviewed and debriefed.

The dependent measures consisted of a structured interview which was then coded for purposes of analysis. The structured interview, which followed the presentation of the video, consisted of a series of questions. The children’s answers were tape recorded for transcription. Each child was asked a series of five questions for each target with the order of questions counterbalanced across subjects (see Appendix 3 for structured interview form).

**Table 7**

Mean Scene Antecedent Ratings for each Antecedent Event by Antecedent Categories for the Intact and Inverse Targets.

<table>
<thead>
<tr>
<th>Rating Category</th>
<th>Antecedent Category</th>
<th>Intact Target</th>
<th>Inverse Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>Positive</td>
<td>5.51</td>
<td>5.31</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>0.00</td>
<td>0.05</td>
</tr>
<tr>
<td>Peer</td>
<td>Positive</td>
<td>5.36</td>
<td>5.08</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>0.03</td>
<td>0.11</td>
</tr>
</tbody>
</table>

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The questions in the interview coincided with the antecedent events present in the video. First, each child was asked a general question about a particular target. For example, "Tell me everything about Paul (intact target) so I will really know what he is like?" Following this general question, children were asked about the target in reference to each of the antecedent conditions. For example, "What would Dan (inverse target) do if a peer, teased, provoked, or threatened him (peer negative)?" This question would be repeated, but changing the antecedent condition (peer positive, adult positive, adult negative). After completion of one target, the questions shifted focus to the other target. The total time to have each subject complete the procedure was approximately 30 minutes.

Coding and Preliminary Analysis

For analytic purposes, subjects' responses were transcribed and coded using a system similar to that of Dawson et al. (1989) and Jan et al. (1989) (see Appendix 4 for coding manual and protocol). Each question was then coded separately to account for possible behavioral variations across context. The general question was also coded according to context or antecedent if the subject provided a context. Context categories for the general question included unconditional (no context specified), conditional (an unspecified context such as sometimes or seldom), peer positive, adult positive, peer negative, and adult negative. Raters judged each codable statement across 20 possible behavioral/descriptive categories which included prosocial, aggression, withdrawal, and disorganized behaviors; angry, sad, lonely, anxious, and positive affects; and positive and negative physical appearances, cognitive abilities, social abilities, physical abilities, target preference, other preference, and general background information. Appendix 7 has complete descriptions of each coding category.
Inter-rater reliabilities were calculated by having two raters code the same ten (10) transcripts. Inter-rater reliabilities were assessed according to context category agreement (general question only), behavioral category agreement (all questions), and finally a combination of context by behavior agreement (general question only). Kappa statistics were calculated with the following results: Kappa (context) = .78; Kappa (behaviors) = .93; Kappa (c X b) = .88.

The 20 behavioral/descriptive categories were then condensed to two main areas of analyses which included judgments (qualitative and dispositional) and pattern matching. Each area of analysis used different parts of the structured interview. For example, judgments were calculated on the basis of the general question responses only, while pattern matching results were calculated using only the context specific questions.
CHAPTER 3: DISPOSITIONAL AND QUALITATIVE JUDGMENTS

Previous research on person perception has focused almost exclusively on how and what observers identify as personality traits or descriptors in the observed (e.g., Furman & Buhrmeister, 1985; Livesly & Bromley, 1967). For example, Livesly and Bromley (1967) reported that younger children base their perception most on physical characteristics. The analysis of judgments here had two main goals. First, I wanted to explore both developmental and clinical differences in children's person perception. In particular, I attempted to analyze the role of contextual information in their judgments. Second, I attempted to replicate some of the earlier developmental findings.

In this chapter I will present and discuss the results concerning children's and adolescent's judgments. First, I will demonstrate similarities between this work and earlier child person perception findings. In addition, I define two types of judgments (dispositional and qualitative) as they relate to this study and then present the results of the individual dispositional judgment categories. Following the analysis of dispositional judgments, I examine the qualitative judgments, first individually, and then, patterns of judgments. I will then examine the pattern of dispositional judgments (overall judgments) across each target as well as study individual and developmental differences with regard to the inverse and intact targets. Finally, I will discuss the implications of these results and how they relate to predictions as well as earlier findings in child person perception.

Replication of Early Developmental Findings in Child Person Perception

As the reader may recall, early research on child person perception suggested that younger children are more likely to use concrete behavioral terms in their judgments, whereas teenagers were more likely to use psychological terms. The current research was designed to examine whether or not this finding is supported even when the target to
be observed is consistent across younger and older children and thus differences cannot be attributed to uncontrolled differences in subjects' real-world peers. To complete such an analysis, coding categories were combined and contrasted to evaluate subjects' use of psychological vs. behavioral descriptors. To obtain the psychological terms, the dispositional judgment categories were combined (aggressive, withdrawn, friendly, and crazy). This category of dispositional judgments was then compared to the background information coding category (e.g., hair or eye color, height, weight). A difference score was then calculated by subtracting the background information category from the dispositional judgment category. To remain consistent with the early literature, only normal subjects were first analyzed using the intact or “real-life” target.

As shown in Figure 1, 14 year-olds used significantly more psychological than behavioral descriptors than did their child counterparts in their judgments of the intact target, \( t(64) = 2.56, p < .02 \). This appears consistent with the earlier findings, in that as 10 year-olds age towards 14 year-olds their use of psychological terms increases, while concrete behavioral terms decrease. It is important to note that the 10 year-olds in this study where slightly older than the 10 year-olds used in either Livesly and Bromley (1967) or Barenboim (1981), while 14 year-olds were of similar age.

A similar analysis of changes in psychological terms with age for normal subjects was performed for the inverse target. Although the pattern of results was consistent with those reported for the intact target, the difference between normal 10 year-olds and 14 year-olds was not significant, \( t(64) = 1.88, p < .10 \). As shown in Figure 2, normal 10 year-olds used fewer psychological than concrete behavioral terms when describing the inverse target.
Differences In The Use of Psychological and Concrete Judgment Terms For Normal Subjects In Describing The Intact Target

![Figure 1](image1)  
*Figure 1.* Differences scores for normal subjects as a function of age. This figure shows the difference scores between psychological and concrete judgment terms used by 10 year-olds and 14 year-olds in describing the intact target. Positive scores indicate more psychological than concrete terms.

Differences In The Use of Psychological and Concrete Judgment Terms For Normal Subjects in Describing the Inverse Target

![Figure 2](image2)  
*Figure 2.* Differences scores for normal subjects as a function of age. This figure shows the difference scores between psychological and concrete judgment terms used by 10 year-olds and 14 year-olds in describing the inverse target. Positive scores indicate more psychological than concrete terms.

An analysis of the clinical groups revealed that the pattern of age-related changes in the use of psychological terms found in normal subjects was not replicated in the clinical groups (e.g., aggressive and withdrawn subjects). Using difference scores, a 3 x 2 x 2 (subject group x age x target) repeated measures ANCOVA was calculated to examine the use of psychological and concrete judgments between groups. There were no significant main effects for target, $F(1,60) = 1.99, p > .15$; subject group, $F < 1$; or age, $F(1,59)$...
However, the age x subject group interaction was significant, $F(2,59) = 3.17, p < .05$. As shown in Figure 3, both the aggressive, $t(64) = -0.18, p > .10$, and withdrawn, $t(64) = 0.37, p > .10$, groups did not differ by age in their use of psychological judgments, whereas the normal 10 year-olds used psychological descriptors less than their adolescent counterparts, $t(64) = 2.03, p < .05$. All other interactions were not significant, nor was the covariate, I.Q.

**Differences In The Use of Psychological and Concrete Judgment Terms By Age and Subject Group**

![Figure 3. Differences scores for all subjects as a function of age and subject group for the intact and inverse targets combined. This figure shows the difference scores between psychological and concrete judgment terms used by aggressive, withdrawn, and normal 10 year- and 14 year-olds in describing the combined targets.](image)

**Dispositional Judgments**

Dispositional judgments were analyzed by calculating a mean relative frequency for a given judgment, which included aggressive, withdrawn, crazy, and friendly. This mean relative frequency was calculated by dividing the number of statements per judgment category by the total frequency of all statements made in response to the general question. That is, this mean relative frequency measures the number of unprompted, free recall statements for a particular judgment category made by a subject relative to or con-
trolled by the amount of talking or judgments made by that subject. Mean relative frequency scores were used to control for differences between groups in total amount of verbiage and reduce the variability within each judgment category. Although there are no appreciable differences between raw and relative frequency data, the raw frequency scores are available in Appendix 5.

Initial three-way analyses of covariance were performed to determine main effects. The three factors were age (10 year-olds v. adolescence), clinical group (aggressive, withdrawn, and normal), and target type (intact v. inverse). The covariate used in this procedure was intelligence. First we will examine individual dispositional judgments (aggression, withdrawal, friendliness, and crazy), and then analyze qualitative judgments.

**Judgments of Aggression.** 10 year-olds and 14 year-olds showed no differences in their use of judgments of aggression, $F < 1$. Similarly, ANCOVA results for judgments of aggression did not show significant main effects for subject group, $F(2, 59) = 1.02, p < .37$, or target, $F(1, 60) = 3.22, p < .08$. There were no significant interaction effects and the covariate, IQ, was also not significant, $F(1, 59) = 3.64, p > .06$.

**Judgments of Withdrawal.** ANCOVA results for judgments of withdrawal showed no differences between 10 year-olds and 14 year-olds, $F(1, 59) = 1.11, p > .30$. In addition, the main effect for subject group was also not significant, $F < 1$. The main effect for target was close to significant, $F(1, 60) = 3.57, p < .06$, with the inverse target ($M = .107, sd = .14$) being judged as more withdrawn than the intact target ($M = .057, sd = .11$). There were no significant interaction effects and the covariate, I.Q., was also not significant, $F(1, 59) = 2.54, p > .12$.

**Judgments of Friendliness.** Use of friendliness judgments did not differ by age, $F < 1$. The main effect for subject groups was also not significant, $F < 1$. Use of friendli-
Child Person Perception

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ness judgments by target showed no significant differences, $F(1, 60) = 3.34, p < .07$. There were no significant interactions and the IQ covariate was also not significant, $F < 1$.

**Judgments of Crazy.** There were no differences between 10 year-olds and 14 year-olds, $F(1, 59) = 1.20, p > .28$ in their use of crazy judgments. The main effects for subject group, $F < 1$, and target, $F < 1$, were also not significant. In addition, there were no significant interaction effects and the covariate of I.Q. was not significant, $F(1, 59) = 3.02, p < .10$.

**Overall Dispositional Judgments.** Given the construction of the targets, it is essential to study how each individual target was judged as a whole across all dispositional categories. That is, was the target judged to be primarily aggressive, withdrawn, crazy, or friendly? Once an understanding is gained of how each target is perceived, differences between the two targets can be analyzed. Therefore I will first examine how youths perceived each individual target’s constellation of dispositions and then compare and contrast the inverse and intact target. To examine this relationship a $2 \times 3 \times 2 \times 4$ ANOVA was performed. This 4-way ANOVA included age (10 year-olds and 14 year-olds), subject group (aggressive, withdrawn, and normal), target (intact and inverse), and dispositional judgment (aggression, withdrawal, friendliness, and crazy).

Not surprisingly, the main effect for dispositional judgments was significant, $F(3,180) = 3.38, p < .02$, with the most judgments being aggression ($M = .129$, s.d. = .17) followed by friendliness ($M = .09$, s.d. = .15), withdrawal ($M = .082$, s.d. = .14), and crazy ($M = .06$, s.d. = .15). However, the main effects for age, $F(1,60) = 1.35, p < .20$; subject group, $F(2,60) = 0.06, p > .90$; and target, $F(1,60) = 1.49, p > .20$, were all not significant. The disposition x target interaction was significant, $F(3,180) = 3.04, p < .03$. As shown in Figure 4, subjects judged the intact target to be a predominantly prosocial...
child who is more aggressive than withdrawn or crazy, whereas the inverse target was seen as a child who is predominantly aggressive child who was also withdrawn and somewhat friendly. In addition, the disposition by age interaction was not significant, $F<1$, while the disposition by subject group, $F(6,180) = 2.91, p < .01$ was. This significant interaction will be explained later in the context of individual targets.

![Dispositional Judgments by Target](image)

*Figure 4.* Dispositional judgments as a function of target. This figure shows the relative frequencies of all dispositional categories used to describe the intact and inverse targets.

**Qualitative Judgments**

In this study, qualitative judgments were the compilation of several coding categories. From these coding categories, three types of qualitative factors were created: Background information, affect, and abilities. The background factor consisted of references such as family, race, age, weight, height, and hair color. The affect factor examined both positive and negative emotional terms used to describe the target. Coding of negative affect consisted of the coding categories anger, sad, lonely, and anxious; the positive affect factor used the descriptors of proud, happy, feels good about himself. The abilities category also included a positive and negative component to code cognitive, social, as well as physical abilities and appearance. Similar to the analyses for dispositional judgments, mean relative frequencies calculated for each qualitative judgment category were...
the number of a specific quality statement (e.g., background information statements) divided by the frequency of all judgments. Calculations using these mean relative frequencies were performed for each of these areas using three-way analyses of covariance to determine group differences in character qualities. The factors were age (10 year-olds and 14 year-olds), clinical group (aggressive, withdrawn, and normal), and target type (intact and inverse). The covariate used in this procedure was intelligence. It should be noted that mean relative frequencies were used to control for differences in subjects' amount of verbalization. Although the mean relative frequencies were more conservative in terms of the significant findings, for those readers interested, Appendix 6 contains descriptive and ANCOVA results for raw frequencies.

**Background Information.** Three-way ANCOVA for Background Information showed no significant differences between 10 year-olds and 14 year-olds, $F < 1$. There was also no significant main effect for subject group, $F(2, 59) = 1.74, p > .18$ or target, $F(1, 60) = 1.42, p > .20$. Similarly, all interaction effects were not significant. Finally, the covariate IQ was significant, $F(1, 59) = 3.96, p < .05$.

**Affect**

Next I will consider how subjects use positive and negative affective statements to describe the target. First, analyses will be reported on negative and then positive affective statements. This will be followed by results which report on the use of positive and negative affective statements combined.

**Negative Affect.** Similar to the background results, the main effects for age, $F < 1$, and subject group, $F < 1$, were not significant. However, the main effect for target was significant, $F(1, 60) = 4.74, p < .03$, with the inverse target ($M = 0.08, s.d. = 0.16$) being judged using more negative affect descriptors than the intact target ($M = 0.03, s.d. = 0.07$).
All interaction effects were not significant as was the covariate, IQ, $F(1,59) = 1.08, p > .30$.

**Positive Affect.** There was no significant main effect for age, $F < 1$ or subject group, $F < 1$, in subjects’ use of positive affect. There was also no significant difference in the use of positive affect to describe the targets, $F(1, 60) = 0.33, p > .55$. In addition, all interactions were not significant, nor was the IQ covariate, $F(1,55) = 1.17, p > .25$.

**Positive and Negative Affect.** Next I considered how 10 year-olds and 14 year-olds used positive and negative affective statements, in relation to one another, to describe target behavior. To examine this relationship a $2 \times 3 \times 2 \times 2$ ANOVA was performed. This 4-way ANOVA included age (10 year-olds and 14 year-olds), subject group (aggressive, withdrawn, and normal), target (intact and inverse), and affect (positive and negative).

The main effects for age, $F < 1$, and subject group $F < 1$, were not significant. However, subjects used more affective statements to describe the inverse (M = .046, s.d. = .10) than they did the intact (M = .022, s.d. = .06) target, $F(1,60) = 4.40, p < .04$. In addition, subjects were more likely to use negative (M = .06, s.d. = .12) rather than positive (M = .01, s.d. = .04) affect statements, $F(1,60) = 12.02, p < .001$. The only significant interaction effect was the target x affect effect. As shown in Figure 5, subjects use of negative affect descriptors was significantly greater than their use of positive affect for the inverse target, but not as great for the intact target, $F(1,60) = 4.36, p < .04$. 

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Abilities

Next I considered how 10 year-olds and 14 year-olds use positive and negative abilities statements to describe target behavior. For this study's purposes, ability statements consisted of items such as smart, dumb, friendly, mean, strong, weak. First, analyses will be reported on negative and positive ability statements in isolation. This will be followed by results which report on the comparative use of positive and negative ability statements.

Negative Abilities. There was no difference in the use of negative ability statements by age, $F(1,59) = 2.43, p > .12$, or subject group, $F(2,59) = 2.27, p > .11$. Similar to negative affect statements, subjects described the inverse target with significantly more negative ability statements ($M=.24, \text{s.d.}=.22$), than they used to describe the intact target ($M=.15, \text{s.d.}=.17$), $F(1, 60) = 7.06, p < .01$. ANCOVA results for negative abilities showed no significant interaction effects, except for a target by subject group effect, $F(2,60) = 5.82, p < .005$. As shown in Figure 6, aggressive subjects used more negative ability statements to describe the inverse target than the intact target, while there were no differences between the withdrawn and normal subjects in describing the intact and inverse targets. The IQ covariate was not significant, $F < 1$. 

Figure 5. Positive and negative affective descriptors as a function of target. This figure shows the relative frequency of positive and negative affective descriptors in describing the targets.
Given the significant differences in subjects’ perceptions of negative abilities for the target’s, a separate 2 x 3 ANOVA (age by subject group) was performed to analyze each individual targets. For the intact target, ANOVA showed no main effects for age, $F(1, 60) = 1.43, p > .20$ or subject group, $F(2, 60) = 1.40, p > .20$. The age x subject group interaction effect was also not significant, $F < 1$.

Use of negative ability statements did not differ by age when subjects described the inverse target, $F(1, 57) = 1.04, p > .30$. However, differences were reported in subject groups use of negative ability statements in describing the inverse target, $F(2, 60) = 5.55, p > .006$. As shown in Figure 6, aggressive subjects (M = .36, s.d. = .29) used more negative ability statements than did withdrawn subjects (M = .24, s.d. = .25), who in turn used more negative ability statements than did normals (M = .12, s.d. = .14) to describe the inverse target. Finally the interaction between age and subject group was not significant, $F < 1$.

**Positive Abilities.** Use of positive ability statements were not different by age, $F < 1$, or subject group, $F < 1$. Similar to 10 year-olds’ and 14 year-olds’ use of negative ability statements, there was a significant main effect in the use of positive ability statement by target, $F(1, 60) = 11.09, p < .002$. The subjects’ attributed more positive ability
to the intact target (M=.34, s.d. = .29) than they did with the inverse target (M=.19, s.d.= 23). There were no significant interaction effects and the covariate, IQ, was also not significant, $F < 1$.

**Positive and Negative Abilities.** Next I compare use of positive and negative ability statements to describe target behavior. To examine this relationship a $2 \times 3 \times 2 \times 2$ ANOVA was performed. This 4-way ANOVA included age (10 year-olds and 14 year-olds), subject group (aggressive, withdrawn, and normal), target (intact and inverse), and ability (positive and negative).

There were no significant main effects in subjects use of ability statements by age, $F(1,60) = 1.21, p > .20$, subject group, $F < 1$, or target, $F(1,60) = 2.27, p > .10$. However, subjects used more positive ($M = .26, \text{s.d.} = .26$) than negative ($M = .20, \text{s.d.} = .20$) ability statements, $F(1,60) = 6.56, p < .01$. The only significant interaction effects was the target x ability interaction, $F(1,60) = 12.52, p < .001$. As shown in Figure 8, subjects used more positive ability statements to describe the intact target while they used more negative ability statements to describe the inverse target.

**Ability Statements as a Function of Target**

![Figure 7. Use of positive and negative ability statements, as a function of target. This figure shows the relative frequency of positive and negative abilities in describing the differences between the intact and inverse targets.](image-url)

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Discussion

10 year-olds and 14 year-olds appear to judge the targets as different. Although this difference does not present itself when individual judgment domains are examined, differences between targets become clear when overall patterns are studied. For example, within individual dispositional judgments categories, such as aggression or withdrawal, no reliable differences were found. However, overall categories, the intact target was judged to be predominantly a more prosocial child, who is more aggressive than withdrawn or crazy. The inverse target, on the other hand, was judged to be a predominantly aggressive child who was more withdrawn than friendly. In addition, the inverse target was judged using more negative affect and negative ability terms than the intact. Conversely, the intact target was judged with more positive ability statements than the inverse target.

With regard to replication of earlier work, it appears that this current work is consistent with the earlier findings concerning types of judgments used by normal 10 year-olds and 14 year-olds (e.g., Livesly & Bromley, 1967). That is, normal 14 year-olds used more psychological descriptors than behavioral judgments to describe a real world person, whereas 10 year-olds did not differ in their use of psychological and behavioral descriptors. However, additional findings with clinical groups and using fabricated non-real world targets suggest that age or developmental factors are not necessarily the primary determinant in what types of judgments 10 year-olds and 14 year-olds use. This data indicates that 10 year-olds do indeed have the cognitive abilities to make and use psychological judgments. Unfortunately, what cannot be gleaned from this research is how and why 10 year-olds and 14 year-olds use the judgments they do.

Although, quite surprisingly, there were no developmental effects other than those reported above, there were some differences among subject groups. Most notable was
the difference between the aggressive subjects and the other two groups. Aggressive 10 year-olds and 14 year-olds consistently used more negative terms than normal or withdrawn subjects. This finding held in terms of aggressive subjects' use of the dispositional judgment of aggression as well as the qualitative judgment of negative ability. Aggressive subjects also used negative terms more often in their description of the inverse when compared to the intact target.

These findings lead to unclear implications for understanding the theoretical underpinnings of child person perception. For example, if individual dispositional judgments are used, explaining the results in terms of the act frequency approach would make sense given the lack of differences between the two targets. However, as one examines the whole package of responses, it quickly becomes more clear that this explanation is not sufficient. As patterns are examined there are clear differences perceived between the targets, yet it is difficult to pin down how the 10 year-olds and 14 year-olds are coming to their judgments (e.g., attributional model or conditional model) given the language they have used to describe the targets.

In addition to the difficulty of understanding these subjects' judgments in comparisons to available theoretical models of dispositional judgments, the results presented here appear to both differ and extend some of the current judgment research, most notable by Dodge and his colleagues (see Dodge et al., 1990; Quiggle et al., 1992; Weiss et al., 1992). Much of Dodge's work has emphasized the hostile or aggressive perceptions of neutral or vague cues by aggressive and depressed children. For example, Dodge et al. (1990) showed video vignettes in which the intent of the peer varied as ambiguous, hostile, accidental, or prosocial. The aggressive subjects were asked to imagine they were the recipient of the action and then asked to attribute the intent of the actor (a. to be mean; b. it was an accident; c. to be helpful; d. unclear). Results showed that the aggres-
sive subjects interpreted a hostile intent by the actor in the ambiguous situation. Similarly, Quiggle et al. (1992) used both aggressive and depressed subjects to explore the hostile attribution bias. This time reading six stories in which the situation was non-ambiguous (e.g., 2 stories in which the subjects tried to enter a group, but were rejected; 2 stories in which a peer ridiculed or bumped them; and 2 stories in which the subject failed an academic task), subjects were asked to imagine they were the recipient of the action and asked to rate whether or not what happened in the story was due to the actor being mean. Results showed that both aggressive and depressed subjects displayed a hostile attribution bias.

It is important to understand that in both of these examples, a subject is asked to judge the intent of another person in a situation in which the subject imagines he is participating in. This is in contrast to this study, in which subjects observe others interacting. In addition, in the Quiggle et al. (1992) study, both aggressive and depressed subjects are thought to have shown a hostile attribution bias in response to only situations of rejection, provocation, and failure. The Quiggle et al. (1992) study differs from this study in that subjects in the present study are exposed to a range of situations including prosocial as well as negative situations.

The results from this current work suggest that this hostility bias for aggressive subjects is present when the cues presented are neither ambiguous nor necessarily directed at the perceiver. That is, aggressive subjects appear to re-interpret non-ambiguous cues as hostile and interpret these cues as hostile even when the perceptions involve other people. However, this hostility bias is not supported for withdrawn subjects. Withdrawn subjects did not appear to re-interpret non-ambiguous cues which involved others, but not the self, as hostile. While interesting in itself, this finding with withdrawn subjects can not be compared to the Quiggle et al. (1992) findings of depressed 10 year-
olds for several reasons. First, in Quiggle et al. (1992) only negative situations were evaluated. It seems unlikely that a hostile attribution bias can be inferred when the only situations presented are non-ambiguous and negative. Second, Quiggle et al. (1992) used depressed subjects while this study uses withdrawn subjects. Finally, this study uses others and does not explicitly employ self-judgments, self-observations, or self-feelings. These results, do, however, elicit a number of interesting questions about aggressive and withdrawn children's information processing styles. For example, do these biases have an impact on the judgment process in terms of aggressive subjects' use, non-use, or differential use of situational information when compared to other children and adolescents?
CHAPTER 4: PATTERN MATCHING

In this chapter I will present and discuss the results concerning children’s and 14 year-olds’ sensitivity to the patterning of targets’ behavior across situations. First, I will define pattern matching or accuracy as it relates to this study. I will then present pattern matching results for individual behavior categories and then examine overall pattern matching results which combines and contrasts all the behavior categories. Following this I will examine the source of errors in children’s and adolescents’ accuracy. Finally, I will discuss the implications of these results and how they relate to earlier predictions.

Pattern matching, for this study’s purposes, was a measure of the degree to which subjects could summarize the patterning of targets’ behavior across situations. For example, recall that the intact target displayed 0 aggressive acts in response to adult and peer praise, 1 aggressive act in response to adult punishment, and 4 aggressive acts in response to peer provocation. Optimum pattern matching in this case would show the subject responding with many aggressive acts in response to peer provocation, little aggression in response to adult punishment, and no aggression in response to peer or adult praise. An example of poor pattern matching would show the opposite pattern with many aggressive acts in response to peer or adult praise, some aggression in response to adult punishment, and no aggression in response to peer provocation. Therefore, pattern matching for each individual behavior category is simply the correlation between the subjects’ estimates of the frequency of a target’s behavior in response to each antecedent event (peer positive, peer negative, adult positive, adult negative) and the corresponding actual frequency to that target’s actual behavior in response to each antecedent event. A broader measure of pattern matching refers to a subject’s ability to summarize the organization of targets’ behavior for all behavior categories and all antecedent events. Thus, optimal overall pattern matching would indicate that the subject would be able to repli-
categ the targets' behavioral response to each antecedent condition. That is, for each of the 16 antecedent by behavior relations (e.g., peer positive with verbally aggressive behavior, peer positive with physically aggressive behavior, peer positive with withdrawn behavior, peer positive with prosocial behavior), subjects would match the antecedent by behavior frequency displayed by the target. Correlations were performed using subjects' response frequencies with the response frequencies of the intact and inverse targets. Four sets of correlations were determined for each type of target: One for each of the three behavior categories (aggressive which collapsed physical and verbal aggression in to one category, withdrawal, and prosocial) and one cumulative set using all behaviors. Fisher's $r$-to-$z$ transformations were then performed on these correlations and three-way analyses of covariance were used to determine group differences in pattern matching. The three levels of analysis included age (children and adolescence), subject group (aggressive, withdrawn, and normal), and target type (intact and inverse). The covariate used in this procedure was intelligence. First I will examine pattern matching for individual behaviors (aggression, withdrawal, prosocial), and then analyze an aggregation of all behaviors as well as differences in abilities to pattern match the different behaviors. It is important to note that these pattern matching measures were based on frequency of responses resulting from specific questions detailing the antecedent events (e.g., What would Paul do if a peer teased or provoked him?). This differs from the dispositional judgment analyses which included the broader more general question explained in the methods section.

**Pattern Matching for Aggressive Behavior**

14 year-olds were better able to match the pattern for aggression than were 10 year-olds, $F(1,56) = 4.03, p < .04$. That is, 14 year-olds, when prompted with the antecedent events, were better able to recall the frequency of aggressive responses which cor-
related with a specific antecedent event for the two targets. There was no difference be­
tween subject groups in their ability to pattern match aggression, $F(2,59) = 1.62, p > .20$.
Subjects were better able to pattern match aggression for the intact target (M= 1.15, sd = .97) than they were for the inverse target (M= -.05, sd = .84), $F(1, 57)= 57.55, p< .0001$. Although no interaction effects were significant, the age by subject group interaction was close to significant, $F(2,59) = 2.67, p < .07$. Finally, the IQ covariate was not significant, $F < 1$.

Since there were target differences for pattern matching, a separate 2 x 3 ANOVA was performed for each target. For the intact target, both the main effects for age,
$F(1,60) = 2.53, p > .10$, and subject group, $F < 1$, were not significant. The age x subject group interaction was also not significant, $F < 1$. Similarly for the inverse target, the main effect for age, $F(1,60) = 1.54, p > .20$, and subject group, $F(2,60) = 1.63, p > .20$, were also not significant. However, as can be seen in Figure 9, a significant age x sub­ject group interaction existed for the inverse target, $F(2,60) = 4.04, p < .03$, which shows that both normal and withdrawn accuracy improved with age, while aggressive subjects were less accurate with age.

Figure 8. Pattern matching for aggression as a function of age, subject group, and target. This figure shows the accuracy of aggressive, withdrawn, and normal 10 and 14 year-olds in recalling the antecedent by behavior patterns for aggression for both the intact and inverse targets.
Pattern Matching for Prosocial Behavior

There was no difference with regard to accuracy for prosocial behavior by age, $F < 1$, or subject group, $F < 1$. There was a significant main effect for target, with greater accuracy being reported for the intact target ($M = .50, sd = .81$) than the inverse target ($M = -.03, sd = .98$), $F(1,56) = 9.33, p < .003$. There were no interaction effects close to significance and the covariate was not significant, $F < 1$.

Since there was a difference between the intact and inverse targets, a separate $2 \times 3$ ANOVA was performed for each target. For the intact target, there were no significant main effects for age, $F(1,58) = 1.70, p > .10$, or subject group, $F < 1$. The age x subject group interaction was also not significant, $F < 1$. Similar results were found for the inverse target. Both the age, $F < 1$, and subject group, $F < 1$, were not significant as was their interaction, $F < 1$, not significant.

As shown in Figure 10, 14 year-olds were better able to match the pattern of the intact target than they were able to match the inverse target, $t(61) = 2.92, p < .01$, while 10 year-olds were close to significant in their ability to more accurately match the intact than the inverse target, $t(61) = 1.67, p < .10$. Aggressive subjects were better able to match the prosocial behavioral profile of the intact target than the prosocial profile of the inverse target, $t(60) = 2.25, p < .02$. Corresponding tests were not significant for normal subjects, $t(60) = 1.68, p < .10$, or for withdrawn subjects, $t(60) = 0.43, p > .20$. 

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Pattern Matching for Prosocial Behavior by Age, Subject Group, and Target

**Figure 9.** Pattern matching for prosocial behavior as a function of age, subject group, and target. This figure shows the accuracy of aggressive, withdrawn, and normal 10 and 14 year-olds in recalling the patterning of targets' prosocial behavior across situations.

**Pattern Matching for Withdrawn Behavior**

Given the targets were modeled after a prototypical aggressive child, the frequency of withdrawn behavior was very low with few examples shown in the stimulus. As such results and conclusions concerning subjects' ability to match withdrawn behavior would not be as reliable other pattern matching results. However, withdrawn results are presented for the sake of completeness.

There was no difference between 10 year-olds and 14 year-olds in pattern matching for withdrawal, $F < 1$. In addition, there were no differences between subject groups on pattern matching for withdrawal, $F(2,58) = 1.77, p > .10$. Pattern matching of withdrawal revealed a significant main effects for target, $F(1, 57) = 4.30, p < .04$ (see Figure 18). However, unlike previous results which show the intact target being more accurately matched, pattern matching for withdrawal revealed that youths were significantly better in matching the behavioral profile of the inverse ($M = .36, sd = .71$) rather than the intact ($M = .09, sd = 60$) target. This result was the complete opposite of the finding with aggressive behavior, where subjects were able to more accurately match the intact target. There were no significant interaction effects, although the age by subject group interac-
tion was marginal, $F(2,58) = 2.51, p < .09$. The covariate was also not significant, $F(1,58) = 1.17, p > .10$.

Since there was a significant difference between the intact and inverse target, a separate 2 x 3 ANOVA was performed for each target. For the intact target, no significant main effects were found for age, $F < 1$, or subject group, $F < 1$. The age x subject group was also not significant, $F(2,60) = 1.64, p > .20$. Similar results for the inverse target were also found with neither the age, $F < 1$, subject group, $F < 1$, or age by subject group interaction, $F < 1$, significant. Figure 11 shows the age by subject group results for each target.

![Pattern Matching for Withdrawal by Age, Subject Group, and Target](image)

*Figure 10. Pattern matching for withdrawal as a function of age, subject group, and target. This figure shows the accuracy of aggressive, withdrawn, and normal 10 and 14 year-olds in recalling the antecedent by behavior patterns for withdrawal for both the intact and inverse targets.*

10 year-olds were more accurate in recalling the inverse target's withdrawal behavior profile than they were for the intact target, $t(62) = -2.44, p < .02$. There were no differences between 14 year-olds' ability to match the intact or inverse target's profiles, $t(62) = 0.98, p > .10$. Also, aggressive subjects were better able to reconstruct the inverse than the intact target, $t(61) = 3.13, p < .01$. Normal, $t(61) = -1.33, p > .10$, and withdrawn, $t(61) = 0.59, p > .10$, subjects were not superior in reconstructing the inverse target.
Overall Pattern Matching

As in the case of dispositional judgments examined in Chapter 3, it is essential to study the accuracy of subjects for each target across all categories of behavior. Note that this overall measure of pattern matching assesses subjects' ability to summarize the patterning of all behavior (verbal and physical aggression, withdrawal, and prosocial) over all situations (peer positive, peer negative, adult positive, and adult negative). Therefore, a subject's accuracy is based on a correlation of the 16 estimated frequencies (e.g., the 16 situation by behavior cells such as amount of aggressive behavior when adult praised), which the subjects provides through their responses to the interview questions, with the corresponding 16 actual frequencies shown in Tables 1 and 2. Subjects are considered more accurate as they more closely approximate the actual context by behavior frequencies displayed by the targets in the video. Pattern matching results will first be presented for each target and then differences between the two targets will be studied. To examine these relationships a 2 x 3 x 2 x 3 ANOVA was performed. This 4-way ANOVA included age (10 year-olds and 14 year-olds), subject group (aggressive, withdrawn, and normal), target (intact and inverse), and behavioral category (aggression, withdrawal, and prosocial).

There was no significant main effect for age, $F(1,55) = 2.07, p > .10$, or subject group, $F(2,55) = 0.29, p > .70$, but pattern matching was higher for the intact target ($M = .57, sd = .92$) than the inverse target ($M = .11, sd = .87$), $F(1,55) = 17.53, p < .001$. In addition, subjects were able to more accurately recall aggression ($M = .57, sd = 1.08$) than withdrawal ($M = .21, sd = .67$) or prosocial behavior ($M = .24, sd = 94$), $F(2,110) = 10.72, p < .001$.

The only significant two-way interaction was target by behavior category, $F(2,110) = 26.11, p < .001$. As shown in Figure 12, the intact target was more accurately recalled
than the inverse target for aggression, $t(59) = 7.79, p < .001$, and prosocial behavior, $t(59) = 3.88, p < .001$. However, subjects were more accurately able to recall withdrawal in the inverse target than they were in the intact target, $t(59) = -3.10, p < .001$.

**Pattern Matching by Behavior and Target**

The only significant three-way interaction was the age x subject group x behavior category interaction, $F(4,110) = 2.87, p < .03$. As shown in Figure 13 which collapses the intact and inverse targets, the results for the aggressive group were sharply different than for both the normal and withdrawn subjects. Specifically, the accuracy of aggression and prosocial behavior recall appeared to heighten with age in both the normal and withdrawn groups. However, the ability to pattern match withdrawal decreased with age, except for the aggressive group in which 14 year-olds were better able to pattern match withdrawal than 10 year-olds. Again, the implications of withdrawn pattern matching should be interpreted cautiously and are not presented in Figure 22 given the low frequency of withdrawal displayed by the targets.
Errors in Pattern Matching

In this section, I examine where subjects make errors in the recall of specific behaviors across situations. The pattern matching measures, reported earlier, assess subjects’ sensitivity to one patterning of behavior across situations, but they do not pinpoint the source of subjects’ pattern matching errors. This is because the correlation between subjects’ estimates of the frequency of a behavior and the actual frequencies of that behavior could be low for several reasons. For example, the correlation could be low because subjects believed that a behavior was constant across situations. On the other hand, the correlation could be low because subjects overestimated the frequency of a behavior in some situations and/or underestimated the frequency of that behavior. Therefore additional analyses of subjects’ estimates of targets’ behavior were performed to help clarify the nature of their pattern matching errors.

In examining the errors in pattern matching results, ANCOVAs were calculated using the raw frequency data of the antecedent specific questions. This allows for comparison by and between groups and targets. However, it is important to note that these results...
can only be used as points of comparisons and should be interpreted cautiously. Specific analyses for these error patterns include amount of perceived aggression within both a negative and positive context as well as amount of perceived prosocial behavior within negative and positive antecedent conditions.

A 2 x 3 x 2 ANCOVA was performed using aggressive responses to negative antecedents. There were no significant main effects for aggressive responses to negative antecedents for age, \( F < 1 \), subject group, \( F(2,59) = 1.07, p > .30 \), or target, \( F(1,60) = 1.65, p > .20 \). The only significant interaction effect was the target by subject group, \( F(2,60) = 3.26, p < .05 \). As shown in Figure 14, aggressive subjects had more difficulty detecting the pattern that the intact target displayed more aggressive responses to negative antecedents. That is, both the aggressive 10 year-olds and 14 year-olds reported the inverse target responded with more aggression to negative antecedents than did the intact target. This is in direct contrast to the actual behavior of the targets in which the inverse target displayed no aggression in response to negative antecedents. The covariate, I.Q., was also not significant, \( F < 1 \).

Similarly, a 2 x 3 x 2 ANCOVA for aggression in positive antecedent conditions showed no significant main effect for age, \( F < 1 \), or subject group, \( F < 1 \). However, while there were no significant interaction effects, there was a significant main effect for target, \( F(1,60) = 9.77, p < .003 \). As shown in Figure 14, all groups followed the pattern that the intact target showed less aggression in response to positive antecedent conditions than did the inverse target. The covariate, I.Q., was also not significant, \( F < 1 \).
Aggressive Responses to Positive and Negative Antecedents by Age, Subject Group, and Target

Negative Antecedents

A 2 x 3 x 2 ANCOVA was also performed using prosocial responses to negative antecedent conditions. Similar to the results for aggressive responses to negative antecedent conditions, no main effects for age, $F < 1$, subject group, $F < 1$, or target, $F(1,60) = 1.40, p > .20$. There was also no significant two-way interaction, but there was a significant age x subject group x target interaction, $F(2,60) = 3.96, p < .03$. As shown in Figure 15, most of the subjects followed the pattern that the inverse target responded more prosocially to negative antecedents than did the intact target. However, withdrawn 14 year-olds and aggressive 10 year-olds failed to replicate this pattern that the inverse target showed more prosocial responses to negative antecedents than did the intact target. Instead, these two groups reported that the intact target displayed more prosocial behav-
ior in response to negative antecedents than did the inverse target. The covariate, I.Q., was also not significant, $F < 1$.

**Prosocial Responses to Positive and Negative Antecedents by Age, Subject Group, and Target**

**Negative Antecedents**

<table>
<thead>
<tr>
<th>Age</th>
<th>Subject Group</th>
<th>Target</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Aggressive</td>
<td>Intact</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Aggressive</td>
<td>Intact</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse</td>
<td>2</td>
</tr>
</tbody>
</table>

**Positive Antecedents**

<table>
<thead>
<tr>
<th>Age</th>
<th>Subject Group</th>
<th>Target</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Aggressive</td>
<td>Intact</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>Aggressive</td>
<td>Intact</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse</td>
<td>3</td>
</tr>
</tbody>
</table>

*Figure 14. Prosocial responses to positive and negative antecedents by age, subject group, and target. This figure shows the locus of errors for prosocial responses to positive and negative antecedent events. Specific age by subject group comparisons are contrasted by the inverse and intact target.*

Finally, a $2 \times 3 \times 2$ ANCOVA showed no main effects for age, $F(1,59) = 2.75, p > .10$, or subject group, $F < 1$, for prosocial responses to positive antecedent events. However, consistent with earlier findings, there was a significant main effect for target, $F(1,60) = 20.23, p < .001$. There were no significant interactions and the covariate, I.Q., was also not significant, $F(1,59) = 1.76, p > .10$. Although not significant, it should be noted that the aggressive 14 year-olds reported that the inverse target displayed more prosocial behavior in response to positive antecedents than did the intact target. As
shown in Figure 15, this clearly violates the pattern established by the other groups in which the intact target displayed more prosocial behavior in response to positive antecedents.

In summary, the analyses of errors showed three basic error patterns. First, aggressive 10 year-olds and 14 year-olds appeared to confuse the intact and inverse targets with regard to aggressive behavior in response to negative antecedents. That is, the aggressive cohorts reported higher levels of aggression for the inverse target than for the intact target. This directly contradicts the actual behavior of the targets in that the inverse target did not display any aggressive behavior in response to negative antecedents. A second error pattern was also found in the recall of prosocial behavior to negative antecedents. Specifically, both the aggressive 10 year-olds and withdrawn 14 year-olds reported that the intact target displayed more prosocial behavior in response to negative antecedents than did the inverse target. Again, this contradicts the actual behavior frequencies of the inverse target in that the inverse target only responded prosocially to negative antecedents. Finally, aggressive 14 year-olds do not differentiate between the targets the number of prosocial responses to positive antecedents, whereas all other groups reported that the intact target displayed more prosocial behavior in response to positive antecedents.

Discussion

In general, all subjects were able to more accurately match the pattern of the intact target. This suggests that these youths had expectations for antecedent by response patterns. That is, 10 year-olds and 14 year-olds appeared to expect the targets to follow certain behavioral norms or conventions. When these norms were violated the subjects had more difficulty with accuracy as evidenced through their lower accuracy with the inverse target.
In addition to target differences, there were some differences in subjects' ability to pattern match by behavior. Although 10 year-olds and 14 year-olds were more accurate in their ability to recall the overall antecedent by behavior pattern for the intact target, there was some variability in their ability to recall specific antecedent by behavior categories. For example, subjects more closely matched both the aggressive and prosocial categories of the intact target. This finding may be accounted for through the higher adaptive significance of aggressive and prosocial behaviors as they were more accurately recalled regardless of target.

In examining developmental differences, 14 year-olds were no more accurate, overall, than 10 year-olds. However, there were developmental differences in their accuracy with regard to specific behaviors and targets. For example, 14 year-olds were more accurate in the pattern matching of aggression than 10 year-olds. 14 year-olds were also more accurate than 10 year-olds when asked about the intact target, but these differences were blurred when subjects were asked to recall the inverse target. This suggests that 14 year-olds have more set expectations on how others will behave than 10 year-olds do. That is, when the actor is more “real world” or follows conventional norms, age appears to influence accuracy, but when the actor is unconventional, not real, there are no age differences. Although this finding has implications for future person perception research, in terms of the need to use real world antecedent-response events, it is somewhat simplistic given the complexity of individual difference results and more importantly, the apparent interaction of developmental and individual differences.

Similar to the developmental findings, subject group differences become most clear when examined in the context of specific behaviors. For example, a clear pattern emerges from the accuracy results which was replicated in several areas. That pattern involves similarities in accuracy between withdrawn and normal subjects compared to
the aggressive group. This pattern showed that withdrawn and normal 14 year-olds were more accurate in recalling both aggression and prosocial behavior, while not as accurate their child counterparts in recalling withdrawal. This suggests that withdrawn and normal 14 year-olds appear to become hypersensitive to aggression, whereas aggressive activity does not stand out for aggressive 14 year-olds. This accuracy around aggression becomes even more interesting when confronted with the results that both aggressive and withdrawn 10 year-olds were more accurate in recalling aggression than normal 10 year-olds.

These findings become somewhat clearer when locus of errors in pattern matching is examined. For example, although aggressive 14 year-olds did not fare as well in the pattern matching of aggression with the two targets combined, there were no differences in the pattern matching of aggression when the intact target was examined in isolation. However, there were differences in how accurate these 14 year-olds were in recalling the inverse target's antecedent by behavior relations. As expected, aggressive 14 year-olds were much poorer at recalling the antecedent by behavior pattern for the inverse target, with their recall being very similar to that of the intact target. This finding also was consistent for aggressive 10 year-olds in that this group also showed a similar pattern for the inverse target. That is, aggressive 10 year-olds recalled a remarkably similar pattern to the intact target when asked to recall the inverse target. Although these findings were expected, one finding which was expected and not found was that 14 year-olds did not more poorly recall the inverse target's aggression pattern when compared with aggressive 10 year-olds. It should be noted that these means were in the right direction but statistically indifferent. These findings do support the hypothesis that aggressive subjects did confuse the intact and inverse patterns for aggression, particularly when compared to the other 10 year-olds. What is more difficult to determine is why there was this confusion.
CHAPTER 5: SUMMARY

The purpose of this research was to extend our understanding of person perception in childhood using experimental methodologies developed to study the accuracy of person perception in adults. To this end, this research used an experimental methodology (e.g., Dawson et al., 1989) with controlled stimuli to study developmental and individual differences in children's and adolescents' person perception. A key feature of this study is that experimental targets displayed the same behaviors, but in response to different antecedent events. In this way, this research begins to clarify the way children and adolescents use information about the relationship between context and behavior in forming impressions and predicting future behavior. As a result, this work differs from earlier research (e.g., Livesly & Bromley, 1967), which used interview methods to assess children's impressions of their real-world peers. The current research also contrasts other work in the area (e.g., Quiggle et al., 1992) which focuses on ambiguous situations and children's perceptions of themselves in clear vs. ambiguous situations.

Following the overall pattern found in adult person perception research, this study tested the hypothesis that as children acquire more knowledge of the actual organization of social behavior, they will demonstrate both an increased sensitivity to specific dispositional categories and an increased ability to reconstruct the patterning of behavior that they have observed in a target. It was specifically hypothesized that: 1) Children and adolescents would detect differences between the intact and inverse targets; 2) Children and adolescents would be able to reconstruct the organization of behavior for the intact better than for the inverse target; 3) Aggressive subjects, especially aggressive adolescent subjects, would be able to reconstruct the intact target more accurately, but would have more difficulty reconstructing the inverse target than other subjects; and 4) Normal adolescents would use more psychological than behavioral descriptors to

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describe the ecologically valid target, whereas normal children would use more behavioral than psychological descriptors.

Taken together, the findings from this research support the hypothesis that children and adolescents use contextual information in their judgments and are sensitive to the organization of behavior. For example, children and adolescents judged the targets to be different and were able to reconstruct more accurately the pattern of behavior for the ecologically representative target (intact) than the unrepresentative target (inverse). Although, aggressive subjects were not able to detect aggression more readily or recover the pattern of behavior for aggression more accurately in the intact target, they did have more difficulty than normal or withdrawn subjects recovering the pattern of behavior for the inverse target. Finally, despite considerable methodological differences, this study replicated some of the earlier developmental findings that normal adolescents used more psychological than concrete behavioral descriptors, whereas normal children used psychological terms no more often than concrete behavioral descriptors (e.g., Livesly & Bromley, 1967).

In this chapter, I will review these findings in greater detail, and examine their implications for the study of person perception. I first discuss the general differences reported between the inverse and intact targets. Next, I will address individual and developmental differences, particularly as they relate to key interactions obtained between age and childhood psychopathology. After reviewing these findings, I will explore alternative interpretations and consider this study's implications for future research on person perception in childhood.

Differences in Dispositional and Qualitative Judgments

As the reader may recall, a basic hypothesis of this work is that the targets would produce different patterns of dispositional judgments. The intact and inverse targets
created in previous work (e.g., Dawson et al., 1989; Shoda et al., 1989) were designed in
part to test adults’ sensitivity to contextual information in impression formation.
Likewise, in the present study these targets were used to clarify the role of antecedent
events in children's and adolescents’ impression formation. Each of the models of
dispositional judgment presented in the Introduction make different predictions
concerning the intact and inverse targets because these models use contextual
information in different ways. For example, the act frequency approach predicts that the
targets would be judged as the same since the targets display the same behaviors at the
same rates. The predictions derived from attribution theory depend on how observers
use consensus information. If little or no consensus information is used, as is sometimes
found in attribution research, then there would be no differences between the targets; this
is because the intact and inverse targets differ only in whether behaviors were displayed
in low or high consensus situations. If subjects do use consensus information, the
predicted effects depends on how subjects integrate the targets’ different responses. For
example, if only “aggressive acts” were used in making judgments of aggression, the
inverse target would be judged more aggressive than the intact, since the inverse target
displays aggression in low consensus situations. If both the “aggressive acts” and
“non-aggressive” acts are somehow combined when making an overall judgment of
aggressiveness, then the inverse target would not be judged highly aggressive. This is
because the inverse target displayed aggressive behavior in low consensus situations, and
also displayed non-aggressive behavior in low consensus situations. Note that in neither
case is the intact target judged to be more aggressive than the inverse. By the same
reasoning, in neither case is the intact target judged to be more friendly than the inverse.
Finally, the conditional model would predict that children will perceive the targets as
different personalities. Specifically, the intact target would be perceived as more
aggressive and more friendly than the inverse, since the intact target displays an antecedent–response pattern consistent with a prototypical aggressive child, whereas the inverse target is not only unrepresentative of an aggressive child, but also general unrepresentative of children in general.

**Target Differences**

In general, the results indicate that children and adolescents were somewhat sensitive to the relationship between context and behavior. However, this sensitivity appeared to be modest when compared to previous studies with adults. As discussed next, a close examination of these results indicates that no single model of dispositional judgment can fully account for the full pattern of results in children’s and adolescents’ impression formation.

Children and adolescents judged the two targets to be different, with the intact target being judged as primarily friendly and somewhat aggressive and the inverse target being judged primarily withdrawn and somewhat aggressive and friendly. Interestingly, when individual dispositional judgment domains were analyzed in isolation, no significant target differences were obtained. For example, there were no significant differences in aggressive attributions between the intact and inverse target. Thus, only when the whole organization of the individual targets was taken into consideration were significant target differences obtained for dispositional judgments.

Given these findings, none of the three models advanced in the introduction of this paper can totally account for the dispositional judgments elicited from these children and adolescents. For example, the fact that no target differences were found for individual dispositional categories suggests that contextual information was ignored, supporting the act frequency approach. However, the fact that target differences were found when all dispositional categories were analyzed simultaneously is not consistent with the act
frequency view. Nor is the pattern of dispositional judgments fully consistent with any version of attribution theory. For example, the inverse target was judged as more aggressive than the intact target, which is consistent with one version of attribution theory. However, using the same consensus principles, the inverse target should also be judged as more friendly, which the findings did not support. Finally, the conditional model would posit that the intact target be judged as more friendly and more aggressive than the inverse. Yet, the difference between the intact and inverse targets was in the expected direction for friendliness, but not for judgments of aggression.

A comparison of these findings with those outlined in earlier work with adults using this methodology may be instructive. For example in Shoda et al. (1989), the subjects were trained counselors, who had worked with children for at least one summer. These subjects used very different dispositions to describe the two extreme targets: the intact targets were described as aggressive, but the inverse version of these targets was not. These very different attributions were evident even when only one domain such as aggression was analyzed. In addition, Dawson et al.’s (1989) findings also indicate differences in dispositions between the targets. However, there were large individual differences in how the intact vs. inverse manipulation affected dispositional judgments. Specifically, experts described the inverse target as less aggressive than the intact target whereas the novices described the inverse target as more aggressive than the intact. In summary, when experienced counselors (e.g., Shoda et al., 1989) and clinical experts (e.g., Dawson et al., 1989) were used, they judged the ecologically valid target as more aggressive than the inverse, whereas when novice undergraduates were used they judged the inverse target as more aggressive than the intact target. These individual differences obtained in earlier findings suggest that the results of the present experiment need to be evaluated in the light of how they compare with experienced counselors (Shoda et al.,
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1989), experts, and novices (Dawson et al., 1989). Therefore, whether or not these findings are consistent with earlier adult results using a similar methodology depends entirely on which adult subject group is used as a reference point. The findings in this present study, at least as far as the dispositional judgments are concerned, appear more similar to the findings with adult novices rather than the more experienced counselors and clinicians.

With regard to qualitative judgments, children and adolescents tended to judge the ecologically valid target as having more positive abilities than the ecologically invalid target. In addition, these youths (children and adolescents) judged the inverse target to have more negative abilities and used more negative affect to describe the inverse than the ecologically valid target. Although these findings do not relate directly to the models of dispositional judgment described earlier, they do relate to subjects' general impression formation. These findings do indicate that subjects perceived the targets as different and suggests that many of the judgments made by children and adolescents in this study do not fit into either the dispositional/psychologically oriented descriptors typically found with older adolescents (e.g., Barenboim, 1981) nor concrete physical characteristics often found in the descriptions of younger children (e.g., Livesly & Bromley, 1973; Scarlett et al., 1971). Instead, these descriptors may bridge these developmental groups as an intermediate step, one which involves task comparison (e.g., he is good at making friends, he is bad at playing basketball).

*Individual and Developmental Differences*

Based on recent expert–novice work (e.g., Dawson et al., 1989) and earlier developmental findings (e.g., Livesly & Bromley, 1973), several hypotheses were advanced concerning developmental and individual differences in dispositional judgments. First, based on some of the earlier developmental work on dispositional
judgments (e.g., Livesly & Bromley, 1973), normal adolescents were predicted to use more psychological descriptors than normal children in describing the intact, ecologically valid target. Second, aggressive subjects were predicted to have specialized knowledge concerning aggressive behavior and detect aggression more readily in the ecologically valid (intact) target. Finally, given that expertise appears to increase with exposure, aggressive adolescents were predicted to be better at detecting aggression than aggressive children in the intact target.

The present research replicated the finding that normal adolescents use more psychological vs. concrete-behavioral descriptors in describing their person perceptions than do normal children. The finding that adolescents use more sophisticated psychological judgments than children helps verify one of Livesly and Bromley's (1967; 1973) major tenets, through experimental methodology as opposed to interview/self-report techniques. However, this results of the present study also clarify the boundary conditions of this shift. When the target being observed violated conventional antecedent-response patterns of an aggressive child, there were no differences between normal children and adolescents in their use of psychological vs. concrete behavioral descriptors. That is, when presented with a plausible (intact) target, normal children tend to use relatively fewer psychological terms than do adolescents, but when presented with an inverse target that violates their expectations, children's use of psychological terms appears to increase. Thus, the use of psychological descriptors or judgments increased with age only when one set of conditions, namely the observation of an ecologically representative target.

The findings obtained with the clinical groups differed from those obtained with normal subjects. For example, children and adolescents in the withdrawn and aggressive groups used more psychological descriptors than concrete terms. In addition, there were
no differences between children and adolescents in their use of psychological vs. concrete/behavior terms when describing the both intact and inverse target. These findings suggest that children, in general, are capable of using more sophisticated psychologically oriented descriptors, as do their older counterparts.

Several interpretations of these individual differences are plausible. First, children may use psychological terms when they are confused or when the pattern of observed behavior violates conventional norms. For example a normal adolescent describing the inverse target might say, “Dan was teasing even when the boy was trying to be nice to him.” In this example, the subject uses aggressive attribution terms in a situation in which aggression is rarely observed. Similarly children may use concrete terms when they understand or make sense of the patterns of behavior they are observing. For example a normal child might say, “Paul is a small boy with blond hair who is sometimes nice and sometimes yells back.” The use of hedges “sometimes” implies variability, but children (like adults) may assume the listner understands when such behavior is most and least likely (Wright & Mischel, 1987). Finally, children may use more psychologically sophisticated descriptors when they have increased or specialized knowledge in a given domain area. For example, aggressive and withdrawn children may use more psychological descriptors when describing familiar behavior such as an aggressive child, to whom they may have had more exposure. These and any other alternative hypotheses will need further empirical study to determine when and why children use or do not use more sophisticated-pyschological descriptors.

Contrary to predictions, aggressive youths were no better at detecting aggression in the intact target than any other subject group. Similarly, aggressive adolescents were no better at detecting aggression for the intact target than their child counterparts. However, when qualitative judgments were examined, it is evident that aggressive subjects were
especially sensitive to the differences between the targets. Aggressive subjects used more negative ability statements to describe the targets than did either the withdrawn or normal youths. In addition, aggressive subjects used more negative ability statements to describe the inverse target than the intact target, particularly when compared with the withdrawn and normal youths. As an example, an aggressive subject might describe the intact as follows: “Paul’s pretty smart and he knows how to make some friends” and describe the inverse target in very different terms: “Dan is dumb and he don’t know how to make friends.” Given that ability (positive and negative) judgments were the most used types of judgments statements by all subject groups, this suggests that aggressive youth were able to detect target differences that other subject groups were not. What they did not do, apparently, was express these differences using dispositional terms (e.g., aggressive, friendly).

Several explanations of children’s and adolescents’ dispositional and qualitative judgments deserve consideration. First, youths may be less sensitive to manipulations of context–behavior pairing than adults. This would be most easily seen in subjects judging no differences in a single domain. For example, even in an adaptively significant domain such as aggression, children and adolescents did not report significant differences in the aggressiveness of the targets. One weakness of this account is that children and adolescents did notice differences in other areas such as abilities. Another weakness is that it does not account for the fact that when the two targets are compared, over all dispositional categories simultaneously, differences exist between the targets.

Second, children and adolescents may be contextually sensitive, but do not articulate this sensitivity in the type of free–form description task used in the present research. For example, clear target differences were obtained for the qualitative judgments which consisted of positive and negative abilities. But, this sensitivity did not
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get expressed in more specific dispositional terms as found in previous work with adults. These arguments seem plausible given that children tend not to provide much information without prompts. In addition, these subjects used many more ability statements as opposed to psychological/ dispositional judgment terms than did adults in other similar studies (e.g., Dawson et al., 1989).

A third explanation could be related to the shift in methodology from text to video format. For example, in the written format used in previous research, contextual cues may be relatively salient or vivid, while in video form the targets' acts may “engulf the field.” This alternative appears worth exploring given that this is the first study to use visual technology in comparing the intact and inverse target. However, given that differences were found on qualitative judgments, it seems clear that contextual cues were not completely ignored.

Finally, the results may be valid, but our understanding of individual differences is still in its infancy. For example, in both Shoda et al. (1989) and Dawson et al. (1989) the subjects who reported the ecologically invalid target as less aggressive were experts or trained counselors. On the other hand, novice subjects judged the inverse target to be more aggressive. Children and adolescents, regardless of their clinical categorization may be more like Dawson et al.'s (1989) novice subjects in their use of dispositional judgments.

Pattern Matching

Another basic hypothesis of this research is that children and adolescents would be better able to reconstruct the behavioral organization of the ecologically valid target than the invalid target. Earlier research in the area of accuracy with adults suggests that perceivers have more difficulty recalling the antecedent–response patterns of targets which violate the expected antecedent–response pairings (e.g., Dawson et al., 1989;
Shoda et al., 1989). Adult perceivers are more accurate in their recall of the intact
target's pattern of behavior, and their relative accuracy in pattern matching appears to
depend on their expertise (Dawson et al., 1989).

**Target Differences**

Consistent with the adult literature, children and adolescents were more accurate in
their recall of the overall antecedent–response patterns for the ecologically valid target
than they were for the inverse target. Given the large difference in pattern matching
between targets, the findings suggest that subjects understand and know the
antecedent–response pattern for an aggressive child, whereas when these patterns are
violated, children and adolescents displayed poorer pattern–matching. This pattern of
greater accuracy for the intact target was also seen for individual behavioral domains.
For example, both children and adolescents were better able to recall the
antecedent–response pairings for both aggression and friendliness in the intact target than
they were for the inverse target. This was especially true for aggression: children and
adolescents were relatively precise in their pattern matching for the intact target, but
were unable to recover the inverse antecedent–response pattern. Although this pattern
did not hold for withdrawal, it should be noted that the low frequency of withdrawn
responses makes it very difficult to interpret the results for the withdrawn category
separately.

In general, these findings suggest that youths, as well as adults, are sensitive to the
organization of behavior. When these typical organizing principles of social behavior are
violated, perceivers have more difficulty reconstructing the target's behavioral patterns.
In addition, given the salience of the domains and their adaptive significance (see Coie &
Pennington, 1976; Wright & Dawson, 1988), it is not unexpected for subjects to be most
accurate in their pattern matching of aggression, followed by friendliness, and finally withdrawal.

Although these findings are consistent with previous results with adults, they are also subject to some of the same alternative explanations and questions. The results from this study and others (e.g., Dawson et al., 1989) show that subjects, regardless of expertise or prior knowledge, have more difficulty reconstructing the antecedent–response patterns for the ecologically invalid target than for the ecologically valid target. One alternative interpretation of this result, in the present study, is that children and adolescents simply did not attend to the targets’ behavior, especially that of the inverse target. In this view, subjects would have responded to prompts in a similar fashion, not distinguishing between the targets and responding to prompts in a fashion most likely consistent with the antecedent–response pattern of a typical child. This appears unlikely for several reasons. First, subjects were able to replicate the antecedent response pattern of the intact target with a high degree of accuracy. Second, it seems implausible for subjects to attend to the intact target and ignore the inverse target given the sequence of target presentation. Finally, this seems implausible given the differences noted between the targets, not only with regard to pattern matching, but also differences in judgments, particularly differences found in qualitative judgments.

Another related explanation which may account for the pattern–matching results is that subjects perceived that the inverse target was different, but could not readily encode the targets’ behavior, and so resorted to random responses. While this explanation could explain some findings, it cannot account for some of the individual and developmental differences. For example, the pattern of errors, particularly for aggressive subjects, was not random and appeared consistent with many of the responses for the intact target. In addition, the ability of the normal and withdrawn subjects to recall the ecologically
unrepresentative target’s antecedent–response pattern was too accurate to be consistent with the random guessing view.

A third interpretation of the results is that subjects reinterpret either the antecedent or response events (see Trophe, 1986; 1989). That is, when presented with either antecedent or behavioral information that does not fit their prior theories, subjects make inferences which allow for a consistent explanation with the prior beliefs. For example, seeing a target respond to a positive antecedent (e.g., “That’s a real nice picture, is that your house”) with an aggressive response (e.g., “Like you could do a better job you stupid jerk”), the observer, knowing that aggressive children do not respond aggressively to peer praise, reinterprets the valence of the antecedent event from positive to negative. This interpretation would be consistent with Chase and Simon’s (1973) work in which chessmasters, when presented with unreal chess configurations, were out–performed by novices, suggesting that experts’ knowledge interfered with their performance on this task. The aggressive adolescents in the present study may have a more rigid prior theory of an aggressive child, and therefore the most difficulty with understanding the inverse target’s behavioral responses. As a result, these aggressive adolescents may have reinterpreted the behaviors to make them more consistent with their prior beliefs. This would explain the error pattern seen with aggressive adolescents in which they reported that the inverse target responded similarly to the intact target, particularly with regard to negative antecedent events. I will return to this possibility after reviewing individual and developmental differences in pattern matching.

Individual and Developmental Differences

Based on recent expert–novice work and earlier developmental findings, several hypotheses concerning developmental and individual differences in pattern matching were advanced. First, aggressive subjects, because they have specialized knowledge
concerning aggressive behavior, would be more accurate in their reconstruction of the 
etologically valid target (i.e., behavior patterns of a prototypical aggressive child).
Second, given their specialized knowledge, aggressive subjects would have the most 
difficulty recovering the inverse target, with aggressive adolescents having more 
difficulty than aggressive children. Finally, given that repeated exposure leads to 
increased accuracy, adolescents will more more accurate than other adolescent groups in 
their reconstruction of the intact or ecologically valid target.

As mentioned earlier for the intact target, all three subject groups showed increased 
pattern-matching accuracy with age for aggressive and prosocial behaviors. Similarly, 
all three subject groups also showed the highest accuracy in pattern-matching for 
aggression and then for prosocial behavior. Children and adolescents were least accurate 
in their pattern matching for withdrawal. The finding that children and adolescents were 
least accurate in their reconstruction of withdrawal is not surprising for two reasons. 
First, it is consistent with what would be expected if these behaviors (aggression, 
friendliness, and withdrawal) varied in their adaptive significance (e.g., McArthur & 
Baron, 1983). That is, aggression is a more important behavioral domain to observe than 
friendliness or withdrawal, in terms of threats to survival, while another’s withdrawn 
behavior has the least threats to one’s survival. Second, this is consistent with Coie and 
Pennington (1976) finding that withdrawal is not viewed as maladaptive, and therefore a 
behavior which does not mandate closer inspection until older adolescence. Note once 
again, however, that given the low frequency of withdrawn behavior displayed by the 
targets, these results must be interpreted with caution.

By contrast, pattern-matching accuracy surrounding the inverse target is not as 
straightforward. Unlike the intact target, there was no overall developmental difference 
in accuracy between children and adolescents. However, within subject groups, there
were developmental differences. For example, normal subjects performed in a manner consistent with their results with the intact target. That is, normal adolescents appeared to prioritize their recall in order of adaptive significance (i.e., most accurately recalling the response patterns for aggression and least accurately recalling withdrawn behaviors).

Finally, as expected, aggressive adolescents had more difficulty recovering the inverse target's behavior pattern than other subject groups. Their pattern-matching accuracy for aggression and prosocial behavior for the ecologically invalid target was lower than that of aggressive children. The source of this poor pattern matching for aggressive adolescents is easily seen in the pattern matching errors (see Figures 13 & 14). For aggression, aggressive subjects' responses to the antecedent events for the inverse target were remarkably similar to their responses for the intact target. That is, aggressive adolescents' responses to antecedent events, particularly negative antecedents, were the opposite of what they actually saw the inverse target do. For example, when prompted, "what would Dan do if a peer was friendly to him," aggressive adolescents would respond, "Be nice back." Instead, what they actually saw which was some form of aggressive response to such events.

These findings demonstrate that aggressive adolescents were not more accurate in their recovery of either the antecedent-response patterns for the individual aggression domain or for the overall prototype aggressive child. In this regard, aggressive adolescents do not appear to be "experts" in detecting aggressive targets. Certainly they do not display the kind of sensitivity found in other research (e.g., Chase & Simon, 1973; Dawson et al., 1989; Shoda et al., 1989) demonstrating expert's ability to recall familiar patterns within their area of expertise. What was consistent with these findings in the area of expert–novice differences (e.g., Chase & Simon, 1973) was that aggressive adolescents had the most difficulty recovering the inverse target's behavior pattern. This
suggests that aggressive adolescents' prior knowledge interfered with their recovery of antecedent–response patterns which violate the expected behavioral norms of an aggressive target.

A comparison of this study to Dawson et al.'s (1989) is instructive in other ways. Dawson et al.'s (1989) experts were able recover the pattern of behavior for the ecologically invalid target better than novices. Dawson et al. (1989) postulate two models to account for this surprising finding. One is that experts clearly saw that the inverse target behaved in a fashion completely opposite the aggressive prototype and used this information to help recover the pattern more completely. The other model is that the experts had more diagnostic options or alternative theories (e.g., a greater understanding of psychopathology) in which to place the inverse target behaviors (e.g., borderline–disorganized child).

These models may be relevant to the current findings. It is clear that aggressive subjects did not recover the inverse or opposite pattern. That is, aggressive adolescents apparently did not recognize that the inverse target was responding in a fashion opposite to that of a prototypical aggressive child. Nor does it appear that they were able to fit the inverse target's pattern of behavior in to an alternative theory (e.g., another diagnostic category such as crazy). Instead, aggressive adolescents reported that the inverse target displayed a pattern similar to that of the intact target, especially for negative antecedent events. For example, aggressive adolescents stated that the inverse target responded aggressively to punishment, just as the intact target did. This suggests that aggressive subjects were unable or did not have at their disposal alternative models, which in turn suggests that aggressive youth may not be as flexible in their processing of social information. Instead they apparently encoded the inverse target, who never responded aggressively to aversive events, into their pre-existing concepts of typical aggressive
targets. Given the possibility of this kind of rigid information processing, I will next attempt to articulate an alternative model for how children encode social information and develop dispositional judgments.

*Alternative Model for Impression Formation*

In general, the available evidence shows that experts are able to recover the intact target more accurately than the inverse and experts are able to recover the intact and inverse target more accurately than adult novices. Adult novices are able to recover the intact target more accurately than the inverse target. In the current study, adolescents were able to recover the intact target more accurately than children and all subjects were able to recover the intact behavioral pattern more accurately than the inverse. In addition, aggressive adolescents were no better at recovering the intact target than other adolescents, but are less accurate in their recovery of the inverse target. Finally, aggressive adolescents used more negative ability statements to describe the inverse target than the intact and used more negative ability statements to describe the inverse target than do other subject groups. Therefore, any account of children's and adolescent's judgments of the intact and inverse target must deal with four findings: 1) the differences between targets in accuracy and judgments; 2) developmental differences within the intact target; 3) the fact that aggressive adolescents were no better than other groups at recovering the intact target, but judged it more negatively; and 4) the fact that aggressive adolescents were unable to recover the inverse target's antecedent-response pattern.

Any model which might account for these differences must include both the encoding and interpretation of social information. It must also incorporate feedback loops in which new information can be processed and interpreted or ignored. Finally,
this model must be able to account for judgments both in a single instance as well as over multiple observations.

In this speculative model, children and adolescents must first assess the new information/target behavior. Such information may be evaluated along the lines of adaptive or personal significance, novelty, etc. For example, when a child observes a target which is aggressive in response to a positive antecedent (e.g., a peer praises the work of a child, who in turn swears at the child for using too much of the paper), the child observer may assess that this is important to the observer because the target child may aggress towards the observer. Once perceived, the observer must then evaluate the degree of correspondence between their prior information or concepts and the target/situation being observed. This information will either match or assimilate a prior theory or not. Keeping the above example in mind, the observer encodes the aggressive behavior, but notices that it is out of context (i.e., aggression in response to a prosocial initiative). If the information matches or is to some degree consistent with earlier experiences (e.g., crazy), then it supports the prior theory, may be categorized as an instance of a dispositional category, and the observer moves on. If the information does not match a prior theory, uncertainty is created. Continuing with the example of act of aggression in response to a positive antecedent, the observer is uncertain. At this point three options are available to the observer. The first option is to ignore or avoid the information and revert to a prior theory. A second option is to reinterpret the information so that it will match a prior theory. For example, the observer reinterprets the antecedent event as teasing, which then matches the resulting antecedent–response pattern for the target into a prior knowledge pattern such as aggressive child. A third option is to re-evaluate using more observations. This re-evaluation can be done in terms of determining what is adaptively significant or the observer could search for information to
support prior theories. Upon re-evaluation the observer then repeats the second and third steps. For example, if the observer watches the target child behave aggressively towards an adult after the adult praised the target, the observer then re-evaluates, determines that this fits a prior knowledge category called “crazy.”

When applied to this data, this model can account for most of the findings. For example, in examining target differences, the behavior pattern of the intact target would fit children’s and adolescent’s prior knowledge of aggressive child’s behavior pattern and, therefore, the recovery of the antecedent response pattern will be more accurate, particularly when compared to the intact target. The inverse target, on the other hand, does not fit into any real-world target and, therefore, subjects would have more difficulty recovering the pattern and judging it different from the intact target. Aggressive adolescents, however, not only have difficulty recovering the inverse pattern, they recall a pattern similar to the pattern recalled for the intact target. This would suggest that when the inverse target is viewed by aggressive adolescents, who have special knowledge of aggressive behavioral patterns, it does not fit a prior theory nor does the target meet expectations. Moving to the second step, uncertainty is created. Keeping in mind that aggressive youths search for fewer cues before making judgments (e.g., Dodge, 1986), the aggressive adolescents may reinterpret the antecedents and behavioral responses so that it matches with a prior theory. Although this prior theory may be that of an aggressive child, clearly aggressive adolescents are aware that it is somehow different from a typical aggressive child. Therefore, while known to be aggressive, in reinterpreting the cues, the aggressive adolescent recognizes that it is a different kind of aggression, for example, perhaps more passive–aggressive or subtle. Then, the recognition of this difference results in a different judgment process which elicits more negative ability statements.
Implications for Future Research

In general this research has employed methodological and theoretical advances not found in earlier person perception work with children and adolescents. For example, earlier developmental work incorporated the use of interviews and non-experimental procedures (e.g., Coie & Pennington, 1976; Livesly & Bromley, 1967; 1973. In addition, with the use of the two targets' (intact and inverse) antecedent–response patterns, this study was able to evaluate the role of context on children and adolescents impression formation. Finally, this work differs from other social information processing research (e.g., Dodge, 1986; Dodge et al., 1990; Patterson, 1986; Quiggle et al., 1992) in that it uses clear and unambiguous situations in which judgment are elicited and does not ask children to make perceptions or judgments regarding their own feelings or behaviors.

In addition, similar to Quiggle et. al.'s (1992) work and their inclusion of depressed subjects, future research should examine the effects of differing pathologies on social information processing. Although the subjects in this study differed in their behavior with regard to aggression and withdrawal, they also exhibited other types of pathological behavior. That is, while one subject may have been aggressive and one withdrawn, they both may have shared clinically significant high scores on other behavioral factors such as “Anxious” or “Obsessive–Compulsive”. It may be that anxiety is the “true” factor which determines differences in social information processing styles. For example, it does not stretch one’s imagination to think about how an obsessive thinking style would alter ones perceptions of a social interaction. An individual who has an obsessive thinking style may ruminate on one particular aspect of an antecedent or response and be unable to attend to other nuances of the interaction. It should be noted that while such research would be worthwhile to pursue, it would be difficult to relate or correlate certain processing styles to certain pathologies given the number of differing diagnostic or
categorization nomenclatures, particularly with children. What may be more useful is the examination of behavioral categories and the functional/cognitive components associated with the given behaviors, including such things as attentional/attending issues, perseveration, and distractibility.

Future research should also attempt to clarify why clinical groups of children and adolescents had more difficulty with unreal people. In that regard, although the alternative model presented is speculative, it is an interesting hypothesis and one which would be easily tested. In addition, incorporating different types of targets such as withdrawn or normal targets as well as target which display other types of behaviors of interest such as dominance would be helpful in understanding how different groups perceive different types of behaviors. This would be especially helpful in understanding how judgments coincide and relate to accuracy with regard to specific domains. Finally, a more precise means of examining judgments and accuracy would also be helpful in clarifying children perceptual processes. These dependent measures should address issues such as confidence in judgments and accuracy as well as specific and predictive behavior frequency estimation by the children for specific antecedent events currently done in adult research.
APPENDIX 1: SCENES FOR VIDEOTAPING PROJECT

Scene 1: Classroom drawing pictures
Peer: You barf face, get out of here.
Paul: No! you're just a scumbag jerk.

Scene 2: Art Room
Peer: That's a nice picture is that your house?
Dan: Like you could do a better job you stupid jerk!

Scene 3: Classroom
Teacher: Dan you did a great job on your book report.
Dan: Thanks, I really liked reading about Tom Sawyer.

Scene 4: Play time in the classroom. (playing cards)
Peer: Yo, is that your head or just your neck growing a giant zit.
Paul: Throws the cards at him.

Scene 5: Classroom
Peer: That was a great hit you had today in gym.
Paul: Thanks, you had some pretty good hits yourself.

Scene 6: Classroom
Teacher: Dan put that down and take a three minute time-out.
Dan: I'm sorry, I'll do better next time.

Scene 7: Art Room
Peer: Paul, you jerk, you just used the last of the green paint.
Paul: It doesn't matter, your picture sucked anyway.

Scene 8: Classroom, where play time is about to begin.
Peer 1: Hey Dan, you want to play 'Monopoly' with me.
Dan: No you're just a scumbag jerk.
Scene 9: Music Class

Teacher: Dan since you’ve been so good, how would you like to use the drums?
Dan: Thanks, I’d love to use the drums.

Scene 10: Playing a game in the classroom

Peer: How much is that dorky in the window, How much is that dorky in the window?
(He points to Paul every time he says Dorky.)
Paul: Yo, if you don’t shut up I’m going to kick your butt.

Scene 11: Trying to carry some boxes for the teacher

Peer: You can’t even do that you nerd.
Paul: Like you could do a better job you stupid jerk.

Scene 12: Classroom

Teacher: Since Dan has been sitting so quietly he can start ‘show and tell’. I’m sure he has something interesting to say.
Dan: Yeah, I went to the ball game the other day, it was great.

Scene 13: Art Class

Peer: That’s a really nice picture you’re drawing, is that your house.
Paul: Thanks, what are you going to draw?

Scene 14: Classroom

Teacher: Paul since you cannot stop talking, you will not be going out for recess.
Paul: That’s not fair you stupid witch.

Scene 15: Classroom

Teacher: Wow, you did a wonderful job cleaning the blackboards.
Dan: (Walks to the corner of the room and turns away from the teacher.)
Scene 16: Play time in the classroom. (playing cards)

Peer: Yo, is that your head or just your neck growing a giant zit.

Dan: Yeah that sounds great.

Scene 17: Classroom with a teacher handing out coupons to children who have behaved appropriately.

Teacher: I'm sorry Paul, but you haven’t behaved well enough today for me to give you a coupon.

Paul: Paul walks slowly over to the corner of the room and turns away from the teacher.

Scene 18: Classroom

Teacher: Since Paul has been sitting so well he can start ‘show and tell’. I’m sure he has something interesting to say.

Paul: Yeah, I went to the ball game the other day, it was great.

Scene 19: Classroom drawing pictures

Peer: You barf face, get out of here.

Dan: Sure I’d Love to.

Scene 20: Classroom

Teacher: I’m very proud of the way you have been cooperating and doing your work.

Dan: That's not fair you stupid witch.

Scene 21: Classroom where two boys are just getting ready to go out for recess.

Peer 1: Hey Paul, you want a piece of gum.

Paul: Hey, Thanks, do you want to play basketball today.
Scene 22: Classroom with a teacher handing out coupons to children who have behaved appropriately.

Teacher: I’m sorry Dan, but you haven’t behaved well enough today for me to give you a coupon.

Dan: I’m sorry, I’ll do better next time.

Scene 23: Trying to carry some boxes for the teacher

Peer: You can’t even do that you nerd.

Dan: Thanks, you are doing really well yourself

Scene 24: Classroom

Teacher: I’m very proud of the way you have been cooperating and doing your work.

Dan: Thanks, I’m really trying hard.

Scene 25: Classroom

Teacher: Dan, put that game away and take a 2 minute time-out, it’s not play time.

Dan: O.K. sorry about that.

Scene 26: Classroom, where play time is about to begin.

Peer 1: Hey Paul, you want to play ‘Monopoly’ with me.

Paul: Sure, I’ll be right there.

Scene 27: Classroom right after music period

Teacher: Paul could you put these instruments away. You know you really sounded good today.

Paul: Thanks, I love to sing (He goes to put the instruments away, singing a tune.)
Scene 28: Classroom

Teacher: Dan! How many times do I have to tell you not to talk out of turn. Since you can't remain quiet, go take a two minute time-out.

Dan: Gee, I'm sorry I keep forgetting. I'll do better next time. (He goes to take his time out.)

Scene 29: Art Class

Peer: Hey Dan do you want to help me paint this picture?

Dan: It doesn't matter your picture sucked anyway.

Scene 30: Music Class

Teacher: Paul since you've been so good, how would you like to use the drums?

Paul: Thanks, I'd love to use the drums.

Scene 31: Classroom

Teacher: Paul put that down, it's not O.K. to touch things that don't belong to you.

Paul: (walks to corner and turns from teacher)

Scene 32: Classroom

Peer: That was a great hit you had today in gym.

Dan: ( Throws cards at peer)

Scene 33: Classroom

Teacher: Paul, put the game back and take a two minute time-out. It's not play time.

Paul: O.K., sorry bout that.

Scene 34: Classroom

Teacher: You need to take a 2 minute time-out

Dan: Yeah O.K. I shouldn't have done it.
Scene 35: Classroom
Peer: When we go on the field trip, do you want to be my partner?
Dan: Yo, if you don’t shut up I’m going to kick your butt.

Scene 36: Classroom
Teacher: Wow, you did a wonderful job cleaning the blackboards.
Paul: Thanks, I really enjoyed doing it, can I clean them again tomorrow.

Scene 37: Classroom
Teacher: Dan since you cannot stop talking, you will not be going out for recess.
Dan: I’m sorry, I’ll do better next time.

Scene 38: Classroom where two boys are just getting ready to go out for recess.
Peer 1: Hey Dan, you want a piece of gum.
Dan: Turns away from the peer.

Scene 39: Classroom
Peer: HA! Paul you are so stupid, you’re as smart as my baby sister.
Paul: Turns away from the peer.

Scene 40: Classroom right after music period
Teacher: Dan could you put these instruments away. You know you really sounded good today.
Dan: (walks to corner and turns from teacher)

Scene 41: Classroom
Teacher: Paul! How many times do I have to tell you not to talk out of turn. Since you can’t remain quiet, go take a two minute time-out.
Paul: Gee, I’m sorry I keep forgetting. I’ll do better next time. (He goes to take his time out.)
Scene 42: Classroom

Peer: When we go on the field trip, do you want to be my partner?
Paul: Yeah, that sounds great.

Scene 43: Art Room

Peer: Dan, you stupid jerk, you just used the last of the green paint.
Dan: Thanks, what are you going to draw.

Scene 44: Playing a game in the classroom

Peer: How much is that dorky in the window, How much is that dorky in the window?
(He points to Dan every time he says Dorky.)
Dan: Sure I'll be right there.

Scene 45: Classroom

Teacher: Paul you did a great job on your book report.
Paul: Thanks, I really liked reading about Tom Sawyer.

Scene 46: Classroom

Peer: HA! Dan you are so stupid, you're as smart as my baby sister.
Dan: Hey thanks, do you want to go play basketball today.

Scene 47: Classroom

Teacher: You need to take a 2 minute time-out
Paul: Yeah O.K. I shouldn't have done it.

Scene 48: Art Class

Peer: Hey Paul do you want to help me paint this picture?
Paul: Sure I'd love to.
APPENDIX 2: RATING PROTOCOLS

Appendix 2 contains samples of protocols used to gather information on the scenes used in this project. Specifically, full context protocols are shown to give the reader an idea as to what types and the process for which each antecedent–response pair was rated. Although only the full context protocols are presented, the reader need only eliminate either the antecedents or behavior responses to get an idea of what subjects were asked to do on the context only protocols.

Protocol 1: Antecedent Events (full context)

INSTRUCTIONS

This task is designed to help us understand how people form impressions of others. What we would like you to do is read each of the twenty-nine (29) items on the attached pages. For example, one item might be, “Hey John, don’t you want to take a turn on the trampoline.” After you read each scene please consider the degree to which each of the statements listed below describes the behavior(s) displayed by the TEACHER OR PEER in that scene.

1. The teacher praised the person he was addressing (e.g., complimented or encouraged the child’s behavior.)

2. The teacher punished the person he was addressing (e.g., the adult scolded or gave a time out to the child).

OR

3. The peer attempted to initiate positive contact (e.g., the peer said something friendly or complimentary.)

4. The peer teased, provoked, or threatened.

Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

So for the example, (Peer 1) "Hey John don’t you want to take a turn on the trampoline," your ratings might look like this:

6 1. The peer attempted to initiate positive contact.
0 2. The peer teased, provoked, or threatened.

Please do this as quickly as you can. We are looking for first impressions. You should assume that all of the children described in this task are 12 years–old.

Please turn the page to begin

99
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 1: Classroom with a teacher handing out coupons to children who have behaved appropriately.

Teacher: “I’m sorry Paul, but you haven’t behaved well enough today for me to give you a coupon.

Paul: Paul walks slowly over to the corner of the room and puts his head down shutting himself off from the rest of the group.

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 2: Classroom where two boys are just getting ready to go out for recess.

Peer 1: “Hey Paul, you want a piece of gum.”

Paul: “Hey, Thanks, do you want to play basketball today.”

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 3: Classroom right after music period

Teacher: Paul could you put these instruments away. You know you really sounded good today.

Paul: Thanks, I love to sing (He goes to put the instruments away, singing a tune.

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 4: Classroom, where play time is about to begin.

Peer 1: Hey Paul, you want to play ‘Monopoly’ with me.”

Paul: Sure, I’ll be right there.”

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 5: Classroom

Peer: HA! Paul you are so stupid, you’re as smart as my baby sister.”
Paul: Paul curls up his body and begins to sob.

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 6: Classroom

Teacher: “Wow, you did a wonderful job cleaning the blackboards.”
Paul: “Thanks, I really enjoyed doing it, can I clean them again tomorrow.”

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 7: Classroom

Teacher: “Thanks for cleaning the blackboards!”
Paul: “Sure, would you like me to do it again tomorrow?”

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 8: Classroom

Teacher: “Paul you need to take a two minute time-out for talking out of turn.”
Paul: “I’m sorry, I forgot.” He goes and does his time-out.

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 9: Playing a game in the classroom

Peer: “How much is that dorky in the window, How much is that dorky in the window? (He points to Paul every time he says Dorky.)

Paul: “Yo, if you don’t shut up I’m going to kick your butt.”

1. The peer attempted to initiate positive contact.
2. The peer teased, provoked, or threatened.

Scene 10: Classroom

Teacher: “Paul, put the game back and take a two minute time-out. It’s not play time.”

Paul: “O.K., sorry bout that”

1. The teacher praised the child she was addressing.
2. The teacher punished the child she was addressing.

Scene 11: Classroom

Teacher: “Paul! How many times do I have to tell you not to talk out of turn. Since you can’t remain quiet, go take a two minute time-out.”

Paul: Gee, I’m sorry I keep forgetting. I’ll do better next time.” (He goes to take his time out.)

1. The teacher praised the child she was addressing.
2. The teacher punished the child she was addressing.

Scene 12: Classroom drawing pictures

Peer: “You barf face, get out of here.”

Paul: “No! you’re just a scumbag jerk.”

1. The peer attempted to initiate positive contact.
2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 13: Classroom

Teacher: “Since Paul has been sitting so quietly he can start ‘show and tell’. I’m sure he has something interesting to say.”

Paul: “Yeah, I went to the ball game the other day, it was great.”

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 14: Art Class

Peer: “Hey Paul do you want to help me paint this picture?”

Paul: “Sure I’d love to.”

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 15: Classroom

Teacher: “Paul you did a great job on your book report.”

Paul: “Thanks, I really liked reading about Tom Sawyer.”

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 16: Playing a game in the classroom

Peer: “Hey you stupid jerk, don’t you even know how to play!”

Paul: “Listen chump, if you don’t shut up I’ll beat your brains out.”

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:
Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 17: Trying to carry some boxes for the teacher

Peer: “You can’t even do that you nerd.”

Paul: “Like you could do a better job you stupid jerk.”

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 18: Art Room

Peer: “Paul, you jerk, you just used the last of the green paint.”

Paul: “It doesn’t matter, your picture sucked anyway.”

_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 19: Classroom

Teacher: “You need to take a time-out.”

Paul: “Yeah O.K., I shouldn’t have teased her.”

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 20: Music Class

Teacher: “Paul since you’ve been so good, how would you like to use the drums?”

Paul: “Thanks, I’d love to use the drums.”

_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 21: Art Class

Peer: “That’s a really nice picture you’re drawing, is that your house.”

Paul: “Thanks, what are you going to draw?”

   1. The peer attempted to initiate positive contact.
   2. The peer teased, provoked, or threatened.

Scene 22: Classroom

Peer: “That was a great hit you had today in gym.”

Paul: “Thanks, you had some pretty good hits yourself.”

   1. The peer attempted to initiate positive contact.
   2. The peer teased, provoked, or threatened.

Scene 23: Play time in the classroom. (playing cards)

Peer: “Yo, is that your head or just your neck growing a giant zit.”

Paul: Throws the cards at him.

   1. The peer attempted to initiate positive contact.
   2. The peer teased, provoked, or threatened.

Scene 24: Art Class

Peer: “Are you going to draw your house for art?”

Paul: “Yeah, I think the teacher will really like it.”

   1. The peer attempted to initiate positive contact.
   2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 25: Classroom

Teacher: Paul since you cannot stop talking, you will not be going out for recess.”

Paul: “That’s not fair you stupid witch.”

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 26: Classroom

Teacher: “Paul put that down! That’s not O.K. to move things that don’t belong to you.”

Paul: (Walks over to the corner of the room away from the activity).

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 27: Classroom

Teacher: “Paul put that down and take a three minute time-out!”

Paul: Walks to the wrong chair and turns it away from the teacher.

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 28: Classroom

Peer: “When we go on the field trip, do you want to be my partner?”

Paul: “Yeah, that sounds great.”

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 29: Classroom

Teacher: “I’m very proud of the way you have been cooperating and doing your work.”

Paul: “Thanks, I’m really trying hard.”

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.
Protocol 2: Behavioral Response Ratings (full context)

**INSTRUCTIONS**

This task is designed to help us understand how people form impressions of others. What we would like you to do is read each of the twenty-nine (29) scenes on the attached pages. For example, one item might be, “John walked over and kicked the other boy.” After you read each item please consider the degree to which each of the statements listed below describes the behavior(s) displayed by “Paul” in that scene.

1. Is a prosocial, friendly behavior (e.g., the child does something socially acceptable).”

2. Is a withdrawn behavior (e.g., the child becomes less involved in the situation).”

3. Is a verbally aggressive behavior (e.g., the child yells swears, threatens, or teases).”

4. Is physically aggressive behavior (e.g., the child hits, kicks, pushes, or throws something or someone).”

*Please use the following scale to make your ratings:*

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

So for the example, “John walked over and kicked the other boy,” your ratings might look like this:

0 1. “Is a prosocial, friendly behavior.”
0 2. “Is a withdrawn behavior.”
0 3. “Is a verbally aggressive behavior.”
6 4. “Is a physically aggressive behavior.”

You should assume that all of the children described in this task are 12 years–old.

*Please turn the page to begin*
Please use the following scale to make your ratings:
Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 1: Classroom with a teacher handing out coupons to children who have behaved appropriately.

Teacher: "I'm sorry Paul, but you haven't behaved well enough today for me to give you a coupon.

Paul: Paul walks slowly over to the corner of the room and puts his head down shutting himself off from the rest of the group.

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 2: Classroom where two boys are just getting ready to go out for recess.

Peer 1: "Hey Paul, you want a piece of gum."

Paul: "Hey, Thanks, do you want to play basketball today."

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 3: Classroom right after music period

Teacher: Paul could you put these instruments away. You know you really sounded good today.

Paul: Thanks, I love to sing (He goes to put the instruments away, singing a tune.

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."
Scene 4: Classroom, where play time is about to begin.

Peer 1: Hey Paul, you want to play ‘Monopoly’ with me.”

Paul: Sure, I’ll be right there.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 5: Classroom

Peer: HA! Paul you are so stupid, you’re as smart as my baby sister!

Paul: Paul curls up his body and begins to sob.

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 6: Classroom

Teacher: “Wow, you did a wonderful job cleaning the blackboards.”

Paul: “Thanks, I really enjoyed doing it, can I clean them again tomorrow.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 7: Classroom

Teacher: “Thanks for cleaning the blackboards!”

Paul: “Sure, would you like me to do it again tomorrow?”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 8: Classroom

Teacher: “Paul you need to take a two minute time-out for talking out of turn.”

Paul: “I’m sorry, I forgot.” He goes and does his time-out.

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 9: Playing a game in the classroom

Peer: “How much is that dorky in the window, How much is that dorky in the window? (He points to Paul every time he says Dorky.)

Paul: “Yo, if you don’t shut up I’m going to kick your butt.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”
Scene 10: Classroom

Teacher: “Paul, put the game back and take a two minute time-out. It’s not play time.”

Paul: “O.K., sorry bout that”

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 11: Classroom

Teacher: “Paul! How many times do I have to tell you not to talk out of turn. Since you can’t remain quiet, go take a two minute time-out.”

Paul: Gee, I’m sorry I keep forgetting. I’ll do better next time.” (He goes to take his time out.)

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 12: Classroom drawing pictures

Peer: “You barf face, get out of here.”

Paul: “No! you’re just a scumbag jerk.”

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 13: Classroom

Teacher: “Since Paul has been sitting so quietly he can start ‘show and tell’. I’m sure he has something interesting to say.”

Paul: “Yeah, I went to the ball game the other day, it was great.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 14: Art Class

Peer: “Hey Paul do you want to help me paint this picture?”

Paul: “Sure I’d love to.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 15: Classroom

Teacher: “Paul you did a great job on your book report.”

Paul: “Thanks, I really liked reading about Tom Sawyer.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

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Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 16: Playing a game in the classroom

Peer: “Hey you stupid jerk, don’t you even know how to play!”

Paul: “Listen chump, if you don’t shut up I’ll beat your brains out.”

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”

Scene 17: Trying to carry some boxes for the teacher

Peer: “You can’t even do that you nerd.”

Paul: “Like you could do a better job you stupid jerk.”

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”

Scene 18: Art Room

Peer: “Paul, you jerk, you just used the last of the green paint.”

Paul: “It doesn’t matter, your picture sucked anyway.”

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 19: Classroom

Teacher: “You need to take a time-out.”
Paul: “Yeah O.K., I shouldn’t have teased her.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 20: Music Class

Teacher: “Paul since you’ve been so good, how would you like to use the drums?”
Paul: “Thanks, I’d love to use the drums.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 21: Art Class

Peer: “That’s a really nice picture you’re drawing, is that your house.”
Paul: “Thanks, what are you going to draw?”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 22: Classroom

Peer: “That was a great hit you had today in gym.”

Paul: “Thanks, you had some pretty good hits yourself.”

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”

Scene 23: Play time in the classroom. (playing cards)

Peer: “Yo, is that your head or just your neck growing a giant zit.”

Paul: Throws the cards at him.

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”

Scene 24: Art Class

Peer: “Are you going to draw your house for art?”

Paul: “Yeah, I think the teacher will really like it.”

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 25: Classroom

Teacher: Paul since you cannot stop talking, you will not be going out for recess.”

Paul: “That’s not fair you stupid witch.”

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”

Scene 26: Classroom

Teacher: “Paul put that down! That’s not O.K. to move things that don’t belong to you.”

Paul: (Walks over to the corner of the room away from the activity).

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”

Scene 27: Classroom

Teacher: “Paul put that down and take a three minute time-out!”

Paul: Walks to the wrong chair and turns it away from the teacher.

_____ “Is a prosocial, friendly behavior.”

_____ “Is a withdrawn behavior.”

_____ “Is a verbally aggressive behavior.”

_____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 28: Classroom

Peer: “When we go on the field trip, do you want to be my partner?”

Paul: “Yeah, that sounds great.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”

Scene 29: Classroom

Teacher: “I’m very proud of the way you have been cooperating and doing your work.”

Paul: “Thanks, I’m really trying hard.”

_____ “Is a prosocial, friendly behavior.”
_____ “Is a withdrawn behavior.”
_____ “Is a verbally aggressive behavior.”
_____ “Is a physically aggressive behavior.”
Protocol 3: Videotape: Antecedent ratings (antecedent only and full context)

INSTRUCTIONS

This task is designed to help us understand how people form impressions of others. What we would like you to do is watch each of the forty-eight (48) scenes and rate them on the attached pages. For example, one item might be, “Hey John, don’t you want to take a turn on the trampoline.” After you watch each scene please consider the degree to which each of the statements listed below describes the behavior(s) displayed by the TEACHER OR PEER in that scene.

1. The teacher praised the person he was addressing (e.g., complimented or encouraged the child’s behavior.)

2. The teacher punished the person he was addressing (e.g., the adult scolded or gave a time out to the child).

OR

3. The peer attempted to initiate positive contact (e.g., the peer said something friendly or complimentary.)

4. The peer teased, provoked, or threatened.

Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

So for the example, (Peer 1) ”Hey John don’t you want to take a turn on the trampoline,” your ratings might look like this:

6 1. The peer attempted to initiate positive contact.

0 2. The peer teased, provoked, or threatened.

Please do this as quickly as you can. We are looking for first impressions.

You should assume that all of the children described in this task are 12 years–old.

Please turn the page to begin
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 1:

____ 1. The peer attempted to initiate positive contact.
____ 2. The peer teased, provoked, or threatened.

Scene 2:

____ 1. The peer attempted to initiate positive contact.
____ 2. The peer teased, provoked, or threatened.

Scene 3:

____ 1. The teacher praised the child she was addressing.
____ 2. The teacher punished the child she was addressing.

Scene 4:

____ 1. The peer attempted to initiate positive contact.
____ 2. The peer teased, provoked, or threatened.

Scene 5:

____ 1. The peer attempted to initiate positive contact.
____ 2. The peer teased, provoked, or threatened.

Scene 6:

____ 1. The teacher praised the child she was addressing.
____ 2. The teacher punished the child she was addressing.

Scene 7:

____ 1. The peer attempted to initiate positive contact.
____ 2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 8:

___ 1. The peer attempted to initiate positive contact.

___ 2. The peer teased, provoked, or threatened.

Scene 9:

___ 1. The teacher praised the child she was addressing.

___ 2. The teacher punished the child she was addressing.

Scene 10:

___ 1. The peer attempted to initiate positive contact.

___ 2. The peer teased, provoked, or threatened.

Scene 11:

___ 1. The peer attempted to initiate positive contact.

___ 2. The peer teased, provoked, or threatened.

Scene 12:

___ 1. The teacher praised the child she was addressing.

___ 2. The teacher punished the child she was addressing.

Scene 13:

___ 1. The peer attempted to initiate positive contact.

___ 2. The peer teased, provoked, or threatened.

Scene 14:

___ 1. The teacher praised the child she was addressing.

___ 2. The teacher punished the child she was addressing.
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 15:
_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 16:
_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 17:
_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 18:
_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 19:
_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.

Scene 20:
_____ 1. The teacher praised the child she was addressing.
_____ 2. The teacher punished the child she was addressing.

Scene 21:
_____ 1. The peer attempted to initiate positive contact.
_____ 2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 22:

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 23:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.

Scene 24:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.

Scene 25:

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 26:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.

Scene 27:

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 28:

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 29:
   _____ 1. The peer attempted to initiate positive contact.
   _____ 2. The peer teased, provoked, or threatened.

Scene 30:
   _____ 1. The teacher praised the child she was addressing.
   _____ 2. The teacher punished the child she was addressing.

Scene 31:
   _____ 1. The teacher praised the child she was addressing.
   _____ 2. The teacher punished the child she was addressing.

Scene 32:
   _____ 1. The peer attempted to initiate positive contact.
   _____ 2. The peer teased, provoked, or threatened.

Scene 33:
   _____ 1. The teacher praised the child she was addressing.
   _____ 2. The teacher punished the child she was addressing.

Scene 34:
   _____ 1. The teacher praised the child she was addressing.
   _____ 2. The teacher punished the child she was addressing.

Scene 35:
   _____ 1. The peer attempted to initiate positive contact.
   _____ 2. The peer teased, provoked, or threatened.
Child Person Perception

Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 36:

   ____ 1. The teacher praised the child she was addressing.
   ____ 2. The teacher punished the child she was addressing.

Scene 37:

   ____ 1. The teacher praised the child she was addressing.
   ____ 2. The teacher punished the child she was addressing.

Scene 38:

   ____ 1. The peer attempted to initiate positive contact.
   ____ 2. The peer teased, provoked, or threatened.

Scene 39:

   ____ 1. The peer attempted to initiate positive contact.
   ____ 2. The peer teased, provoked, or threatened.

Scene 40:

   ____ 1. The teacher praised the child she was addressing.
   ____ 2. The teacher punished the child she was addressing.

Scene 41:

   ____ 1. The teacher praised the child she was addressing.
   ____ 2. The teacher punished the child she was addressing.

Scene 42:

   ____ 1. The peer attempted to initiate positive contact.
   ____ 2. The peer teased, provoked, or threatened.
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 43:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.

Scene 44:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.

Scene 45:

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 46:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.

Scene 47:

_____ 1. The teacher praised the child she was addressing.

_____ 2. The teacher punished the child she was addressing.

Scene 48:

_____ 1. The peer attempted to initiate positive contact.

_____ 2. The peer teased, provoked, or threatened.
Protocol 4: Videotape: behavioral response ratings (behavior response only and full context)

INSTRUCTIONS

This task is designed to help us understand how people form impressions of others. What we would like you to do is watch the forty-eight (48) scenes on the television monitor. For example, one item might be, “John walked over and kicked the other boy.” After you watch each scene please consider the degree to which each one listed below describes the behavior(s) displayed by “Paul or Dan” in that scene.

1. Is a prosocial, friendly behavior (e.g., the child does something socially acceptable).”

2. Is a withdrawn behavior (e.g., the child becomes less involved in the situation).”

3. Is a verbally aggressive behavior (e.g., the child yells swears, threatens, or teases).”

4. Is physically aggressive behavior (e.g., the child hits, kicks, pushes, or throws something or someone).”

Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6 Highly Descriptive

So for the example, “John walked over and kicked the other boy,” your ratings might look like this:

0  1. “Is a prosocial, friendly behavior.”
0  2. “Is a withdrawn behavior.”
0  3. “Is a verbally aggressive behavior.”
6  4. “Is a physically aggressive behavior.”

Please do this as quickly as you can. We are looking for first impressions.

You should assume that all of the children described in this task are 12 years–old.

Please turn the page to begin
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 1:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 2:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 3:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 4:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 5:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 6:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 7:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 8:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 9:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 10:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 11:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 12:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

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Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 13:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 14:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 15:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."

Scene 16:

____ "Is a prosocial, friendly behavior."
____ "Is a withdrawn behavior."
____ "Is a verbally aggressive behavior."
____ "Is a physically aggressive behavior."
Please use the following scale to make your ratings:

Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 17:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 18:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 19:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 20:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 21:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 22:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 23:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 24:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."
Scene 25:

- "Is a prosocial, friendly behavior."
- "Is a withdrawn behavior."
- "Is a verbally aggressive behavior."
- "Is a physically aggressive behavior."

Scene 26:

- "Is a prosocial, friendly behavior."
- "Is a withdrawn behavior."
- "Is a verbally aggressive behavior."
- "Is a physically aggressive behavior."

Scene 27:

- "Is a prosocial, friendly behavior."
- "Is a withdrawn behavior."
- "Is a verbally aggressive behavior."
- "Is a physically aggressive behavior."

Scene 28:

- "Is a prosocial, friendly behavior."
- "Is a withdrawn behavior."
- "Is a verbally aggressive behavior."
- "Is a physically aggressive behavior."
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 29:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 30:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 31:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 32:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 33:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 34:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 35:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."

Scene 36:

_____ "Is a prosocial, friendly behavior."
_____ "Is a withdrawn behavior."
_____ "Is a verbally aggressive behavior."
_____ "Is a physically aggressive behavior."
Please use the following scale to make your ratings:
Not at all Descriptive  0  1  2  3  4  5  6  Highly Descriptive

Scene 37:
   _____ “Is a prosocial, friendly behavior.”
   _____ “Is a withdrawn behavior.”
   _____ “Is a verbally aggressive behavior.”
   _____ “Is a physically aggressive behavior.”

Scene 38:
   _____ “Is a prosocial, friendly behavior.”
   _____ “Is a withdrawn behavior.”
   _____ “Is a verbally aggressive behavior.”
   _____ “Is a physically aggressive behavior.”

Scene 39:
   _____ “Is a prosocial, friendly behavior.”
   _____ “Is a withdrawn behavior.”
   _____ “Is a verbally aggressive behavior.”
   _____ “Is a physically aggressive behavior.”

Scene 40:
   _____ “Is a prosocial, friendly behavior.”
   _____ “Is a withdrawn behavior.”
   _____ “Is a verbally aggressive behavior.”
   _____ “Is a physically aggressive behavior.”
Please use the following scale to make your ratings:

Not at all Descriptive 0 1 2 3 4 5 6 Highly Descriptive

Scene 41:

[ ] "Is a prosocial, friendly behavior."
[ ] "Is a withdrawn behavior."
[ ] "Is a verbally aggressive behavior."
[ ] "Is a physically aggressive behavior."

Scene 42:

[ ] "Is a prosocial, friendly behavior."
[ ] "Is a withdrawn behavior."
[ ] "Is a verbally aggressive behavior."
[ ] "Is a physically aggressive behavior."

Scene 43:

[ ] "Is a prosocial, friendly behavior."
[ ] "Is a withdrawn behavior."
[ ] "Is a verbally aggressive behavior."
[ ] "Is a physically aggressive behavior."

Scene 44:

[ ] "Is a prosocial, friendly behavior."
[ ] "Is a withdrawn behavior."
[ ] "Is a verbally aggressive behavior."
[ ] "Is a physically aggressive behavior."
Please use the following scale to make your ratings:

Not at all Descriptive  0 1 2 3 4 5 6  Highly Descriptive

Scene 45:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 46:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 47:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”

Scene 48:

____ “Is a prosocial, friendly behavior.”
____ “Is a withdrawn behavior.”
____ “Is a verbally aggressive behavior.”
____ “Is a physically aggressive behavior.”
APPENDIX 3: STRUCTURED INTERVIEW FORMS

In this appendix the reader will find an example of the structured interview forms used in the data collection. Each structured interview for consisted of three parts: Instructions, questions, and problem form. This appendix starts by displaying the instructions and then shows 1 of the 8 sets of questions used. As noted in the Methods Chapter, the questions were rotated and subjects counterbalanced so as to avoid an order confound with regard to question type (e.g., peer positive, peer negative, adult positive, or adult negative) or target (e.g., intact or inverse). The example shown here starts with a peer positive, inverse target question as the first context laden question.

**Instruction Page**

Subject #_____________________

**Instructions**

This is a project in which we are trying to understand how children and teenagers see different situations. What I would like you to do is watch a videotape. Then I will ask some questions after it is all done.

The videotape is about some boys in a classroom. They will be doing things that you might see happen in school. I will ask you to watch the video closely. While you watch the videotape, pay especially close attention to Paul and Dan. These are pictures of Paul and Dan. They are both 12 years old and attend the same school. You will see them doing different things. You will first see a blue screen followed by videotape pictures. After the scene is done you will see another blue screen. There will be many different scenes; you will see Paul and Dan the same number of times.

Now I have to read you a letter which says that you understand what is involved and agree to do it.

[Read The Informed Consent Letter to the Child and Have Them Sign It]

Again, I want you to watch the videotape closely, and after it is all done I will ask you to answer some questions about what you saw. Your answers will be recorded on a tape recorder so I don’t have to write what you have said.

Do you have any questions?

Please remember that once the videotape starts, I will not be able to answer any questions. So this is your last chance to ask questions for 15 minutes.

Are you ready? Let’s Begin
Questions Page

Subject #____________

Dan

1. Pretend that I do not know who Dan is, Tell me everything you know about Dan so that I will know what he is like.

   Prompt to get more information
   Tell me what he is like...
   Tell me everything you can...
   Can you tell me more about Dan
   Is there anything else about Dan that you know...

2. Suppose a classmate was friendly to Dan. What do you think Dan would do?

3. Suppose a classmate teased, provoked or threatened Dan. What do you think Dan would do?

4. Suppose a teacher punished Dan for something he did. What do you think Dan might do?

5. Suppose a teacher told Dan he was doing a great job or said something nice to him. What do you think Dan might do?

Paul

1. Pretend that I do not know who Paul is, Tell me everything you know about Paul so that I will know what he is like.

2. Suppose a classmate was friendly to Paul. What do you think Paul would do?

3. Suppose a classmate teased, provoked or threatened Paul. What do you think Paul would do?

4. Suppose a teacher punished Paul for something he did. What do you think Paul might do?

5. Suppose a teacher told Paul he was doing a great job or said something nice to him. What do you think Paul might do?
Problem Form

Subject #__________

Child Person Perception Task Problem Sheet

Subject #__________

Experimenter’s Initial’s: ____________

Date:_____________

Time:_____________

Where there any problems during this session? __________ if so, explain


When in the session did the unusual circumstance occur?_________


Did this Problem interfere with the data collection of the experimental process? if yes, explain.


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This manual was developed to help analyze data, collected over the last two years, which examines how children and adolescents perceive and understand social events. More specifically, I am interested in what each child saw as salient information from a specific situation which was shown to each child. However, before I can look at any specific data, I need to have each child’s responses coded by individuals who are unfamiliar with this project.

This manual will describe the coding procedure and specific codes to be used in labelling each person’s responses. You will be coding transcripts from tape recorded and written protocols of both children and adults. There will be a total of 90 protocols to be coded. It is estimated that the total project will require 30 hours. Coding at first will seem very time consuming, but as you become more familiar with the procedure the time per transcript is cut in half.

It is recommended that you familiarize yourself with the codes and the coding procedure before you begin actual coding. Over the next few pages you will find instructions on coding and then the specific codes used in this project.

If you have any questions about the project, please call Tom at any time.

INSTRUCTIONS FOR THE CODING PROCEDURE

I. BASIC INSTRUCTIONS

Coding will be done with the use of tailor-made coding sheets. These sheets were designed to speed your coding and make life generally easier for all of us.

On each sheet you will find two major areas: one marked Paul and the other Dan. Both areas are exactly the same, just different names. YOU
ARE TO USE ONE (1) CODING SHEET PER SUBJECT (i.e., 1 sheet per subject number). To code, all that is required is to mark off ticks for each codable response in the appropriate coding category. This process is elaborated in more detail in following sections.

II. IDENTIFYING INFORMATION

Across the top line of the coding sheet you will find a two lines. These lines identify the subject and the coder. The Subject number has a four digit number followed by three letters.

Ex. 1207.ANI

Please make sure that you write the correct number in the space provided. Without the correct number the coded information is useless. Write your name in the space provided for the Coder.

III. SPECIFIC CODES

After you have completed the identifying information line, the next step is actual coding of the transcript. As you look at the coding sheet you will see a matrix of bubbles (20 rows X 52 columns). The rows represent different observations. That is each time the subject states a different description of the target you will code it on a new row, up to 20 descriptions per page.

The columns represent the different coding categories. There are eight (8) column clusters which will help you organize your coding response. These clusters are Question Type, Context, and Descriptors {Prosocial, Withdrawn, Aggressive, Disorganized, Feelings, and Non–Behavioral Codes}. These will all be explained in detail below. However each observation or row must have at least two (2) bubbles filled in and at most three. The QUESTION TYPE must always be completed and there must always be one type of DESCRIPTOR. The optional code is the CONTEXT area. It may or may not be bubbled. The obvious point is that you bubble in the code that you think fits the statement made by the subject.
A. QUESTION TYPE

The first information to be coded for any set of observations is the type of question to which the subject is responding. In this study there are five possible questions: General, Peer tease, Peer friendly, Teacher praise, or Teacher punish. On the coding sheet these questions are coded in the first section of the observation line under the category of Question Type. The five question types are coded in the following way:

- Gen = General Question
- PP = Peer Friendly
- AP = Teacher Praise
- PN = Peer Tease
- AN = Teacher Punish

These codes, when translated to the goals of the research, stand for Peer Positive (PP), Adult Positive (AP), Peer Negative (PN), and Adult Negative (AN). The reason for this translation will make more sense when you read the next section on Context.

B. CONTEXT CODES

The Context Codes are codes which relate the conditions under which the subject is describing behavior. As a result this section may be left uncoded if the subject does not state a context in which the behavior is occurring. For the purposes of this study there are five possible contexts: Conditional, Peer Positive, Adult Positive, Peer Negative, and Adult Positive.

It is important to note that the Context Codes are not used just because the Question asked of the subject is context specific. It must only be coded when the subject him/herself states a context in which the observation is made. For example, you would not automatically code a context response for the question: Tell me what Dan would do if he were teased, provoked, or threatened. You would only code a context response (Peer Negative) if the
subject stated, "If he was teased he would hit back." The key phrase and codable response was "If he was teased..."

Conditional: The Conditional Context code is used when a subject makes reference to an observation that occurs on a part-time basis, but the specific context is not described or labelled. Some examples of the Conditional code are:

Sometimes, Often, Usually, Part of the time, Occasionally

As you can see these examples are conditional but do not give a specific context, such as Sometimes when others tease him he... Only use this code when there is no specific context, situation, or condition stated. If there is a specific condition stated, then you must code the response in one of the following categories:

Peer Positive: Peer positive codes are used when the subject reports a specific behavior occurring in a context or situation in which a peer or friend (any non-adult) is interacting in a positive or friendly manner. You should assume that if the subject is talking about a friend that the friend is of the same age as the target. Some examples of a Peer Positive context include:

When a boy is nice to him..., If someone ask him to play basketball... If someone tries to be friendly... When a kid ask him for help...

You should also code a Peer Positive context code if the activity to be engaged in is related to children (eg., playing a game, etc.)

Adult Positive: Adult positive codes are used when the subject reports a specific behavior occurring in a context or situation in which a teacher, adult, or counselor is interacting in a positive, praising, or rewarding fashion. Some examples of a Peer Positive context include:
When a teacher says he did a good job...
If a counselor tells him that he had a good hit...
If an adult ask him to help clean up...

Peer Negative: Peer negative codes are used when the subject reports a specific behavior occurring in a context or situation in which a peer, classmate, or friend (any non-adult) is interacting in a teasing, provoking, or threatening manner. Some examples of a Peer Negative context include:

If a boy teases...
If someone says he looks like a nerd...
When someone is mean to him...

Adult Negative: Adult Negative codes are used when the subject reports a specific behavior occurring in a context or situation in which a teacher, adult, or counselor is interacting in a punishing, warning, or limit setting manner. Some examples of an Adult Negative context include:

If a teacher says he doing something wrong...
When a counselor gives him a time out...
When a teacher says he's not paying attention...

Remember... A Context Code does not always have to be used. Also the context stated in a particular question does not mean that a Context Code is used. Only when a subject states a condition for the behavior to occur do you use a Context Code. This means that most of the Context codes will be used when responding to the General question.

*** However, when using the specific codes which follow please remember the question’s stated context. This may have an impact on how you code a behavior.

Example: Peer Tease question and Teacher Punish question might have the same response... He tried to ignore him. Clearly this has a different meaning depending on the question even though the subject did not state a specific context or condition. Accordingly the coding will be different for each
question, a prosocial vs aggressive (albeit passive-aggressive) response.

C. PROSOCIAL CODES

There are five Prosocial codes which are used to record any behaviorally appropriate actions. The codes are as follows:

Prosocial Undifferentiated (PR): This would include references to communicating effectively with others, doing the right thing, and behaving in an appropriate manner.

- Examples: He plays a lot. Tell a counselor. He tries to make friends

Considerate of Others (CS): A description of this type would show that the child has a recognition for another’s feelings, or is willing to share with others.

- Examples: He tries to ignore him. He is able to keep his cool

Remains Calm Under Stress (RC): This refers to a child who behaves appropriately under stress such as being teased.

- Examples: He tries to ignore him. He is able to keep his cool

Comply/Cooperate (CC): This category would include instances of the child doing as the teacher asks or the child in being helpful with either peers or adults.

- Example: Thanks, I’m really trying hard. He helps the teacher clean up.

Anti-Aggression (AA): This is to be used when the subject says someone is not aggressive or doesn’t like to tease or fight. No other connotation can be inferred other than a not aggressive tendency.

D. WITHDRAWN CODES

There are five Withdrawn codes which are used to record any behaviors which may be seen as avoiding actions. The codes are as follows:
Withdrawn Undifferentiated (WD) This code refers to withdrawn behavior which cannot be coded in the other withdrawn categories. This would include behaviors such as someone who takes a long time doing something or is sluggish.

Cries (CR): This coding category includes acts of crying, whining, or talking babyish.

Isolates Self (IS): This refers to physical isolation, such as leaving the room. It also refers to activities which are solitary.

Examples: He reads a lot; He draws a lot; He walks to the corner

Low Self-Esteem (SE): To be used when the child is described as being down on himself, as having no respect or worthless. This also includes behaviors which represent the child giving in or up, not defending or standing up for oneself. Also code avoiding new activities and experiences in this category.

Examples: He feels bad about himself; He lets others push him around; He says he can’t do it; He won’t try it because he’s afraid he’ll get hurt.

Withholding (WI): Includes acts of being untalkative or refusing to verbalize. The child keeps important information bottled up inside—doesn’t talk about his problems.

Examples: He keeps everything a secret; He won’t say what is wrong.

E. AGGRESSIVE CODES

There are five Aggressive codes which are used to record any actions which may be aggressive or acting out. The codes are as follows:

Aggressive Undifferentiated (AG): This is the default category which is to be used if none of the other aggressive categories are appropriate. This includes denial, putting the blame on others, omnipotence, egocentricity, dishonesty.
Examples: He’s aggressive; He wants to get him back real bad; He says he didn’t do it even if he gets caught; He cheats at games; He lies a lot.

Physical Aggression (PA): This category refers to all acts where physical harm is committed or intended for another. Also if the aggression is directed towards property.

Examples: hit, kick, push, bite, scratch, throw at, temper tantrum

Verbal Aggression (VA): Non-physical aggression which is spoken. This would include threatening, bosses, bullies, intimidates, swearing, provoking, taunting, yelling, and screaming.

Examples: He is always bossy; He teases a lot

Impulsive Behavior/Low Frustration Tolerance (IM): This category is for behavior which are unmeditated and spur of the moment. It also includes description which show difficulty delaying gratification and a low frustration tolerance.

Examples: He loses his temper real easy; He often does things without thinking; He can’t sit still

Tests Limits (TL): This category includes references to when a child behaves in a manner to see how much he can get away with.

Examples: He does things to see what he can get away with; Sometimes when an adult says no he tries anyway.

**F. DISORGANIZED CODES**

The disorganized codes are used to describe unusual or crazy behavior which doesn’t make sense. There are seven codes within the Disorganized Factor. They are:

Confusion (CO): This refers to the description of having mixed-up thoughts, poor causal thinking, poor planning skills, and disorganization.
Examples: He doesn’t understand things so good; He gets confused about what should happen next; He gets real mixed up; He doesn’t make any sense; He can’t handle himself; He loses it

Distractible (DT): This category describes poor attention span; difficulty staying focused, poor concentration, being out in space, or daydreaming.

Bizarre Behavior (BB): This category would include statement where the target makes bizarre faces or idiosyncratic behavior. The behavior exhibited in this category is simply out of the norm and is considered weird or unusual.

Examples: He’s weird; He always does stupid things like making weird noises.

Poor Reality Testing (RT): With this category the child seems unaware of what is going on. This is stronger than the distractible and confused codings. This category refers to descriptions of children who are totally unaware of the world around them. They cannot grasp the goings on of a situation.

Example: No matter how many times he was punished, he still doesn’t know what he did was wrong. Johnny goes out and plays when its raining, he just doesn’t seem to notice any difference.

Acts Silly (AS): This category refers to silly kooky behavior. The connotation can be of both a positive and annoying nature.

Example: He acts silly sometimes, you know pretending he’s a dog.

Outcast (OC): This category would include descriptions about how others wouldn’t want to play with him, or how they pick on him, or basically don’t include him in activities.

Aversive (AV): This category subsumes behaviors which are offensive or annoying to others; for example, acts that were interruptive, complaining, uncomfortable, etc.
G. FEELING CODES

This category of codes is for descriptions of feelings. They are as follows:

Feels Angry (FA): Includes being mad, enraged, ticked off, pissed
Feels Sad (FS): Includes sad, depressed, unhappy, miserable
Feels Lonely (FL): Includes lonely, rejected, unloved, alone
Feels Fearful/Anxious (FF): Includes being fearful, afraid, scared
Positive Feelings (F+): This category is for descriptions where the child is described as feeling good about himself, proud, happy.

H. NON–BEHAVIOR CODES

This category of codes is to be used when the descriptors are non–behavioral. That is they are adjectives not actions. For each code except General Background Information there will be a (+) and a (−) for positive and negative aspects of the code.

Physical Appearance (A +/-)
1. (+) would be given to descriptions of good looking, handsome, nicely built
2. (−) would be given to descriptions of gross, ugly

Cognitive Ability (C +/-):
1. (+) smart, good drawer, thinker, etc.
2. (−) dumb, slow thinker

Social Ability (S +/-):
1. (+) good manners; shaking hands, etc
2. (−) bad at coping, poor social skills

Physical Ability (P +/-):
1. (+) strong, good athlete
2. (−) Weak, bad at sports, awkward
Target Preference (+/−):
1. (+) he likes Paul or Dan
2. (−) he hates Paul or Dan

Others’ Preference (+/−):
1. (+) I like him
2. (−) I hate him

General Background Information (GB): References to family, race, residential locality, age, weight, height, eye color, etc.
APPENDIX 5: RAW FREQUENCIES FOR DISPOSITIONAL JUDGMENTS

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### Child Person Perception

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### Friendliness

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**APPENDIX 6: RAW FREQUENCIES FOR CHARACTER QUALITIES**

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**Negative Affect**

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