The specific purpose of the research discussed was to develop an instrument which would permit assessment of individual and developmental differences in the acquisition of abilities to understand and utilize emotional and psychological facets of interpersonal behavior. Emotional insight was assessed in 81 male and female children between the ages of 6 and 13 years, using 12 stories that were presented in cartoon form, each on a 16 x 20 card. No conversation was depicted in the cartoon sequences; the number of frames varied from 9 to 11. Included in the frames were nonverbal cues indicative of an appropriate emotion and behavior which was based on the emotion. The stories varied in the degree of sophistication required to interpret them. After each child viewed a cartoon sequence, he was asked to tell the story twice, as the child saw it and as the other people in the story would tell it. After viewing all 12 sequences, each subject was given a Peabody Vocabulary Test. Results show that the technique permits assessment of individual developmental rates and sequences, as well as antecedents and consequents of emotional interpersonal insight. (DB)
The development of self and interpersonal awareness requires, among other things, some degree of insight into the role of emotion in producing and explaining behavior. This, in turn, requires an ability to identify specific emotional states and psychological defenses, and to place them in a causal relationship with behavior. The focus of this research is the testing of the hypothesis that children's understanding of emotional and psychological causality develops in a gradual and predictable manner.

The more specific purpose of the present research was to develop an instrument which would permit assessment of individual and developmental differences in the acquisition of abilities to understand and utilize emotional and psychological facets of interpersonal behavior. A technique was devised to evaluate the level of sophistication and other specific components of interpersonal insight.

Method

Subjects

A sample of 81 male and female children between the ages of 6 and 13 was obtained from a predominantly middle-class suburban school system. An initial pool of subjects was selected from the total school population by randomly choosing from within the top, middle and bottom thirds of the distribution of either group intelligence tests or achievement tests. For those grades where intelligence tests were available, those scores were used; in other instances achievement test scores were used. The breakdown of the experimental sample by age and sex is presented in Table 1.
Procedure

Instrument

The method for assessing emotional insight consisted of 12 stories each presented in cartoon form on a separate 16 x 20 card. No conversations were depicted in the cartoon sequences and the number of frames in each varied from 9 to 11.

All stories, while differing in specific content, followed a regular pattern. There was an initial provocation for an emotional reaction. The emotions of sadness, anger and fear were represented an equal number of times. Subsequent to the emotional arousal the "hero" was seen interacting with someone who had arrived on the scene after the initial situation had occurred. Included in the frames were nonverbal cues indicative of the appropriate emotion, and behavior which was relatively inexplicable without understanding the emotion but clear if the emotion were taken into account.

The stories also varied in the degree of sophistication required for children to interpret them. Half of them depicted straight-forward reactions to emotions, while the remaining half included what could be perceived either as psychological defense or simple as added complexity. In these latter instances the emotion was not continuously visible but was concealed by the "hero" and then re-elicited by some subsequent events.

An example of the category of simpler stories is that of a boy whose coin falls into a sewer. Although he tries, he is unable to retrieve it and sits despondently on the curb with his chin in his hand. His friends come by with baseball equipment, obviously motioning for him to join them. He turns and walks away dejectedly with his hands in his pockets.

The following exemplifies the more complex stories. A boy is walking
along with a bird in a cage. He slips, falls, the cage opens, and the bird flies away. He walks away sadly until his friends appear. Once in their presence he inexplicably acts in ways which make him appear extremely happy until another child appears with her pet cat. Seeing the cat he is reminded of his pet bird and becomes sad. He then wanders away from his friends and leans dejectedly against a tree.

Each of the three emotions was represented in two simple and two more complex story lines.

Testing

Each subject was seen individually at school during regular school hours. Simple instructions were given explaining that they would be seeing some cartoons and would be asked to tell the story for each one. They were told that we were interested in knowing how children their age understood cartoons such as these. After viewing a cartoon sequence, the subject was asked to tell the story. A standard inquiry procedure followed, specifying questions to ask for each significant aspect not fully covered in the spontaneous story. Each story was told twice: once as an explanation of the plot line as the subject saw it and then once as the other people in the story would interpret it. After all twelve cartoon sequences, each subject was given a Peabody Picture Vocabulary Test.

Results

Each story was rated on a zero to two scale for identification and explanation of the emotions produced in the story and for explanation of the emotion-behavior sequence. A scoring manual was developed with specific criteria for each category of each story. The inter-rater reliability was .90.
Variations in difficulty and obviousness of stories, even within the two intended levels of complexity, became apparent with testing. For this reason, standard scores were used for all stories; total scores represented the sum of the twelve standard scores. Each story was correlated with the total score. These correlations ranged from .14 to .49.

The emotional sophistication scores correlated with the Peabody Intelligence quotients at .33. The correlation between age and the total score was .59. An analysis of the covariance, holding the effect of IQ constant, produced an F=218.66, significant at the .001 level. Thus, it seems clear that we are dealing with a developmental dimension beyond simple problem solving and dependent on more than just intelligence. There were no differences between the sexes and no significant interactions between either sex and IQ or age.

Implications and Conclusions

Of basic importance in terms of the purposes of the study, the development of the technique permits assessment of individual developmental rates and sequences as well as antecedents and consequents of emotional-interpersonal insight.

Currently underway are investigations of differences between normal and psychologically disturbed children to assess whether those in the latter category fail to perceive emotion or are inept in utilizing it in explaining and understanding behavior, or whether both facets of function are deficient. This line of investigation has implications not only for understanding childhood psychopathology, but potentially for the treatment of childhood disturbances as well.

A major emphasis is also being placed on the relationship between psychological understanding and the overcoming of egocentric thinking. There
are a number of interesting and significant questions about whether egocentrism must be overcome in order to develop insight into other's emotions or whether the acquisition of insight is itself a step in the process of becoming non-egocentric.
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