The contribution of cognitive and affective experiences on empathy in children was assessed. It was expected that children receiving experience with both components would show more empathy than those receiving experience with only one or neither of these components. Six- to eight-year-olds participated in two phases, Training and Assessment. In Training, a child either received experience with (a) recalling situations they had experienced, (b) demonstrating emotions of story characters, (c) both components, or (d) neither component. In Assessment, children listened to stories and subsequently responded to three sets of drawings, which assessed (a) their understanding of each story situation, (b) their understanding of each character's emotional reactions, and (c) their own emotional reactions to the situations and characters' emotions. The results suggested that experience with either the cognitive or affective component deleteriously affected empathy in children; but having experience with both components maintained their previous levels of empathy. (Author)
EFFECTS OF RECALL OF EXPERIENCE AND EMOTIONAL DISPLAY UPON EMPATHY IN CHILDREN

Charlotte Johnston
and
Gregory Fouts
University of Calgary

paper presented to the Canadian Psychological Association, Ottawa, June, 1978.
Numerous definitions of empathy have been proposed in the literature. Generally, these definitions can be divided into two major categories; those which view empathy as primarily a cognitive process, and those which regard the affective component as most essential to empathic responding. Investigators such as Borke (1971) and Dymond (1949), who emphasize the cognitive aspects, define empathy as the ability to understand another individual's emotion and the situational context within which this emotion occurs. Alternatively, researchers like Feshbach and Roe (1968) and Stotland (1969), who are interested in the affective component of empathy, suggest that an empathic response appears when an individual responds to another's emotion with an identical emotional experience. This lack of consensus concerning how empathy is defined has resulted in the development of a great variety of techniques for assessing empathy. Role-taking tasks, assessment of mood, and the ability to predict another individual's behavior have all served as indicators of empathic ability. With this wide variation in the conceptualization and measurement of empathy, numerous processes have been examined under the rubric of empathy; and consequently, research in empathy is difficult to integrate and evaluate as a unified body of research.

In this study, empathy was defined as involving both a cognitive and an affective component. It was assumed that the combination of these two components is essential and necessary for an empathic response to occur. Therefore, to be empathic, an individual must understand the other's emotion and the situational context within which it occurs, and must respond with an emotion which matches that of the other. This definition was chosen for its comprehensive nature and its ability to differentiate between empathy and other processes such as perspective-taking and emotional contagion.

A relatively limited amount of research has been concerned with the developmental aspects of empathic responding. Borke (1972) has suggested that
the development of empathy is a gradual process whereby a child progresses from relative insensitivity to the feelings of others through a series of stages which culminate in mature empathic ability. In young children, recognition of emotion, attribution of one's own feelings to others, imitation and numerous other such processes may function as the developmental forerunners of empathy in a child's interactions with others. However, as a child matures cognitively and emotionally, his role-taking skills become more flexible and he develops greater recognition and differentiation of emotional expressiveness both in himself and others. Thus, both the cognitive and affective skills necessary for empathic responding are gradually mastered as a child matures. It seems reasonable to assume that the appearance of empathic responding occurs when a child integrates his cognitive and affective skills and employs them jointly in his interactions with others.

The study reported here was designed to assess empathic responding in children. Particular emphasis was placed on investigating the relative contributions of the cognitive and affective components of empathy. An attempt was made to manipulate separately and in combination, children's use of the cognitive and affective components in order to assess the subsequent effects on their ability to respond empathically. It was predicted that children who used both components, that is, cognitive and affective, in combination would show more empathy than children using either the cognitive or affective component alone.

As well as attempting to provide developmentally relevant support for empathy as a two-component process, this study also attempted to examine the occurrence of responses which appear empathic but may actually be mediated by other processes. An empathic response, in part, requires that a child understand the other's emotion and the situational context within which it occurs.
Unless the assessment of empathy necessitates this understanding, projection may account for behaviors which appear to be empathic. For example, a child's judgment of another's emotion may be the result of his vicarious experiencing of the situation and his subsequent attribution or projection of his own thought and feeling to the other. In addition, empathic responding requires that a child understand the situational context within which the other's emotion appears. Simple matching of emotional responses cannot be considered empathy since the child may merely be imitating the emotional response of the other and then inferring a situation appropriate to this emotion.

One way to distinguish projection and imitation from empathy is to use incongruent associations of the other's emotion and situation. To illustrate, if a child is using projection in his responding, he will attribute the correct emotion to the other when the other's emotion is congruent with the situation. For example, if the situation is a birthday party, the child will attribute the appropriate emotion of happiness to the other. However, if the emotion is incongruent with the situation, a child using projection will not attribute the correct emotion to the other. For example, he will again choose happiness as the other's emotion if the situation is a birthday party, while the other's emotion is actually sadness. If a child is using imitation in his responding, he will experience the same emotion as the other and will infer a situational context which is appropriate to this emotion. In the congruent associations, for example, a happy child at a birthday party, the child will choose the correct situation since it is appropriate to the emotion. However, in the incongruent associations, an unhappy child at a birthday party, the child will infer an incorrect situation because he will again be choosing the situation on the basis of appropriateness to the emotion. From this illustration, we
see that it is only with the use of incongruent associations of the other's emotion and situation that a child can be shown to be responding empathically with both the cognitive and affective components of empathy. This assessment technique was expected to provide support for the two-component process of empathy; as well as allowing the differentiation of empathy from related processes.

Six to eight year-old children participated in the two phases of this study. The initial phase involved training in various aspects of empathy, while the second phase involved an assessment of empathic responding. Thirty-two children were randomly assigned to one of four groups in the training phase with eight children per group. The only restriction on assignment was that each group contain approximately equal numbers of males and females.

Familiar story themes which were appropriate for six to eight year-olds were used in the training and assessment phases. Two situational contexts, one pleasant and one unpleasant, and two character's emotions, one happy and one unhappy, were generated for the story themes. The four story themes and the various combinations of situations and emotions were partially counterbalanced throughout the study.

In the training phase, each child individually listened to two stories in which the situational context and character's emotion were presented separately. All stories used in training contained a congruent association between the situation and emotion. That is, a pleasant situation was accompanied by a happy emotion and an unpleasant situation was paired with an unhappy emotion. In the Cognition condition, children were directed to focus on the cognitive component of empathy. The situations in the stories were emphasized and each child was encouraged to recall and describe similar situations he or she had experienced and his or her emotional reaction to these. For example, if the story concerned a birthday party, a child was asked to recall parties he or
she had attended and how he or she had felt. In the Affect condition, children were focused on the affective component of empathy. The character's emotional reaction in the story was emphasized and each child was encouraged to imagine and demonstrate this emotion. For example, a child was asked to show what he or she said and did when they were happy. In the Cognition plus Affect condition, children were directed to focus on both components of empathy by both recalling similar situations and demonstrating the emotion. Additionally in this condition, the relationship between the situation and the emotion in the story was emphasized. The Control condition provided a baseline for empathic responding. Neither the situation nor the emotion in the story was stressed and instead, only neutral comments by the experimenter were offered.

Following the training phase, each child's ability to respond empathically was assessed. The children individually listened to two different stories. In these stories, unlike the stories in the training phase, the situational context and the character's emotion were combined and integrated. In one of the stories, the association between the situation and the character's emotion was congruent. That is, a happy emotion was combined with a pleasant situation or an unhappy emotion with an unpleasant situation. In the other story, the association between the situation and emotion was incongruent. That is, a happy emotion was paired with an unpleasant situation or an unhappy emotion with a pleasant situation. The order of presentation of these two stories was counterbalanced. Immediately after each story, children responded to three sets of black and white schematic drawings. Understanding of the situation was tested with a set of five drawings which represented the situation in the story the child had just heard. The accuracy of detail in these drawings varied systematically from exact to highly inaccurate reproductions of the story. Understanding of the story character's emotion was assessed with a set of five drawings of facial expressions ranging from very happy to very unhappy. These varied from...
accurately representing the character's emotion to being highly inaccurate. A child's own emotional response to the story was assessed using the same facial drawings. That is, a child was asked to indicate which facial expression represented how he or she had felt while listening to the story. An empathic response required choosing drawings which accurately reflected the situation and character's emotion in the story and the matching of emotion between the character and listener.

Children's selections of drawings were transformed into match scores which reflected the degree of similarity between their selections and the actual situation and character's emotion in the story, and the degree to which the child's own emotion matched that of the story character. These match scores varied from one to five, with a score of one representing an identical match and scores from two through five representing decreasing amounts of matching.

This use of match scores was consistent with the definition of empathy chosen in this study. It was assumed that, for any particular story, a child must select the correct drawings to represent the situation and character's emotion and must select a drawing to represent his or her own emotion which is identical to the correct drawing of the character's emotion. Thus, a child who receives scores of one on his or her selections for situation, character's emotion and own emotion can be said to be empathizing.

Nonparametric analyses of the match scores revealed no significant differences among the four training conditions in their total amounts of matching. That is, when an overall measure involving matching for situation, character's emotion and own emotion was used, the four training conditions showed similar degrees of empathic responding. This equality among the conditions held regardless of whether a congruent or incongruent association between situation and character's
emotion was presented in the story. However, when each training condition's distribution of match scores was compared to the distribution predicted by chance, the amount of empathic responding occurring in the Cognition plus Affect and the Control conditions was significantly greater than chance expectations for both congruent and incongruent associations of situation and emotion.

Comparisons among the conditions were conducted separately on match scores for situation, character's emotion and own emotion. For congruent stories, there were no significant differences among the four conditions in their match scores for situation, character's emotion or own emotion. For incongruent stories, no significant differences were found among the four conditions on their scores for situation or character's emotion. However, the scores for own emotion did show significant differences. The Cognition plus Affect and Control conditions both produced significantly more matching of own emotion to that of the character than did the Cognition or Affect conditions. No differences existed between the Cognition plus Affect and Control conditions or between the Cognition and Affect conditions. These findings suggest that the stories with incongruent associations of situation and emotion were more sensitive to differences among the conditions than were the stories with congruent associations. It also appears that the children in the Cognition and Affect conditions were lacking the affective component involved in empathy.

Generally, the results of this study suggest two conclusions concerning empathic responding in young children. First, evidence was found which indicates that six to eight-year-old children are capable of a relatively high degree of empathic responding. Secondly, the results suggest that focusing on either the cognitive or affective component of empathy in isolation may interfere with a child's ability to empathize, or alternatively, focusing on both the cognitive and affective components seems to be necessary for empathy to occur. In addition, the use of incongruent associations of situation and character's emotion appears
to be a useful technique for controlling the occurrence of non-empathic responses. Using stories containing such incongruent associations necessitates the use of both cognitive and affective components for a response to be empathic.

Evidence that the children in this study were capable of empathic responding prior to the experimental manipulations is found in the performance of the Control condition. These children received no training in empathy or any of its components and still demonstrated the same relatively high degree of empathic responding as the Cognition plus Affect condition, who received training in both components of empathy. This suggests that children in this study were initially capable of this same level of empathic responding, and the Cognition plus Affect condition's training appears to have only reinforced their already existing ability to be empathic. However, children in the Cognition condition and in the Affect condition appear to only be using the cognitive component involved in empathy, while showing a deficit in the affective component necessary for an empathic response. That is, they understand the situation and the character's emotion but are unable to match their own emotion to that of the character. This loss of the affective component only appears when the situation and character's emotion are incongruently associated.

One interpretation of these results is that training children to focus on only one component of empathy, either cognitive or affective, interferes with their ability to respond empathically. It is possible that the incongruent association of situation and character's emotion presented a more complex cognitive task than a congruent association of these cues. If left to their own devices, as in the Control condition, or if directed to focus on both components of empathy, as in the Cognition plus Affect condition, children appear to have little difficulty integrating and interpreting this incongruent association of situational and emotional cues. This integration and interpretation
then leads to a child displaying his or her already present empathic capabilities. On the other hand, the focusing on only one component of empathy, as in the Cognition and Affect conditions, may have made the integration and interpretation of the two aspects particularly difficult when they were incongruently associated. This difficulty may have led children in these conditions to be overly concerned with comprehending the stories, too concerned to allow them to become emotionally involved. Consequently, the cognitive component may have been gained at the expense of the affective component.

The finding that training in either the cognitive or affective component interfered with the affective component of empathy rather than the cognitive component suggests that the affective component may be newly acquired in six to eight-year-olds. Hence, the use of this component may still be tentative and more susceptible to interference effects. Feshbach and Roe (1968), using only congruent associations of situation and emotion, found that social comprehension of the character's emotion was seen more often in six and seven-year-olds than was an affective match to the character. Shantz (1975) also suggests that preschool children are capable of understanding the character's emotion but seldom respond with the same emotion. Further studies are needed to clarify the developmental rate, sequencing and contribution of various skills to the emergence of empathy in children.
References


