Recent publicity about sexual abuse may be creating more negative attitudes toward normal physical affection. In a study designed to probe this possibility, 301 parents, nonparents, and early childhood professionals rated the extent of their approval of videotaped adult-child interactions. Before viewing the tape, half of the subjects read a statement about sexual abuse and the other half read about the benefits of touch. Within each group, half of the subjects were told that the videotaped adults were parents while the others thought the adults were day care providers. Analysis of approval scores for touch and no-touch scenes showed that: (1) when subjects were attuned to sexual abuse they were more likely to disapprove of affectionate touching and to favor non-physical interactions; (2) subjects approved physical affection more when it came from a parent rather than from a day care provider; (3) men tended to be less approving than women of physical affection between adults and children; and (4) early childhood professionals were especially approving of physical affection and their opinions were more resistant to manipulation than were other subjects' opinions.
Influences on Attitudes Toward Physical Affection Between Adults and Children

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Abstract

Recent publicity about sexual abuse may be creating more negative attitudes toward normal physical affection. In this study 301 subjects (parents, nonparents, and early childhood professionals) rated approval of videotaped adult-child interactions. Before viewing the tape, half of the subjects read a statement about sexual abuse and the other half read about the benefits of touch. Within each group, half of the subjects were told the videotaped adults were parents and the others thought they were day care providers. Analysis of approval scores for touch and no-touch scenes showed that (1) when subjects are attuned to sexual abuse they are more disapproving of affectionate touching and more approving of non-physical interactions; (2) affection is more highly approved when it comes from a parent than a day care provider; (3) men approve less of adult-child physical affection than women do; and (4) early childhood professionals are more approving of physical affection.
Influences on Attitudes Toward Physical Affection Between Adults and Children

Hugs, loving touches, and lap-sitting are generally recognized components of high quality early childhood programs (Endsley & Bradbard, 1981; Harms & Clifford, 1980; Hyson, 1986; National Academy of Early Childhood Programs, 1984; Prescott, Jones and Kritchevsky, 1972; Scarr, 1984). And yet recent publicity about child sexual abuse in day care appears to be generating a more negative climate towards positive touch and physical affection in child care. The following paper examines the role of physical affection in early childhood and reviews some research and theories which may predict how attitudes toward affection are formed or changed. It reports the results of an experimental study designed to examine the factors influencing attitudes toward physical affection between adults and children, and discusses the implications of this study for future research, child care practices, and public information.

The child development literature supports the importance of touch, physical affection, and positive emotion in adults' interactions with children. Prenatal research has shown that the sense of touch is the earliest of the senses to develop in the human embryo. Sensitivity to touch around the mouth can be seen as early as the eighth week after conception. It is generally believed that the earliest developing functions are also those most basic to the organism (Montagu, 1971). This appears to be the case with the sense of touch in humans.

Research on pre-term infants, who are routinely removed from their parents and receive less handling than full-term infants, also supports the importance of positive touch. Field et al. (1986) found that pre-term infants who were
provided with body stroking and passive limb movements showed greater weight gain, more active and alert times, and shorter hospital stays than controls. Kattwinkel, Nearman, fanaroff, Katona and Klaus (1975) found that rubbing the extremities of pre-term infants was associated with significant decreases in the frequency of apneic episodes in these infants during and briefly after the tactile stimulation. Korner's studies (1984) have focused on the effects of touch combined with movement. With full-term infants, she found that providing body contact with the caregiver and movement to an upright position on the shoulder generally resulted in babies who were visually alert and attentive and thereby in the best state for stimulation.

Studies of attachment show children's preference for close physical contact with adults. An early well-known animal study by Harlow (1958) provided the basis for studies concerning the importance of touch in the formation of attachments with human infants. Harlow isolated infant rhesus monkeys from their mothers and placed them in cages. When given a choice between a cloth surrogate "mother" which provided no food and a wire surrogate "mother" which provided milk, the monkeys formed attachments to the tactilely comforting cloth mothers rather than those which provided food. While direct generalizations from primates to humans should be made with caution (Suomi, 1984), this line of research suggests the central importance of physical contact in early development.

Bowlby (1973), an ethological theorist, described five behaviors in the human infant which serve to bring the child physically closer to the caretaking adult. These "proximity-promoting behaviors"—crying, smiling, sucking, following, and clinging—were held by Bowlby to be central to the development of secure attachments.
A more recent study by Roedell & Slaby (1977) with 24-week-old infants found that the infants preferred distal adult interaction (which included smiling, talking, singing, playing) over proximal adult interaction (which included carrying, rocking, patting, and stroking). While this seems to contradict Harlow's and Bowlby's emphasis on physical contact, the authors suggested another interpretation. Proximal contact alone is rare in normal adult-child interaction. Rather, adults tend to talk to and smile at infants while holding them, and the combination of touching and talking may be preferred by infants over either type of interaction in isolation. This preference was not tested by Roedell and Slaby, however, and awaits empirical verification.

The affective quality of early parental behavior (including but not limited to physical affection) directly influences the young child's current functioning. A series of studies including those of Tronick, Ricks, and Cohn (1982) have shown that emotionally unresponsive maternal behavior results in marked changes in the infant's displays of positive emotion, especially when the adult's unresponsiveness contrasts with previously positive interactions (Hembree & Izard, 1986). Secure attachments, which seem to grow out of the caregiver's emotional and physical responsiveness to the child, facilitate the child's ability to explore (Ainsworth, Blehar, Waters, & Wall, 1978), albeit with periodic refueling (Mahler, Pine & Bergman, 1975) via a hug or a cuddle. Toddlers' responses to a frustrating problem-solving task are enhanced by a secure attachment to the caregiver and by the adult's "supportive presence" (including physical closeness) during the task (Arend, Gove, & Sroufe, 1979). In the childrearing literature, adults' provision of warmth and nurturance has been linked to children's development of positive self-concepts (Coopersmith, 1967) and prosocial behaviors (Zahn-Waxler, Radke-Yarrow & King, 1979).
The research described above shows that, in the context of a warm, loving, stimulating environment, positive physical affection facilitates child development in several areas. Despite this research, anecdotal evidence suggests that public attitudes toward adult-child affection have grown more negative (Baker, 1985; Mazur & Pekor, 1985). In the wake of recent publicity about sexual abuse, many child care workers say that parents are more suspicious of caregivers' expressions of affection toward children, especially if the caregiver is male. Some day care centers have initiated policies restricting the duration, frequency, or nature of the physical contacts staff may have with children. Statistics tell us, however, that "fewer than 1% of all reported child sexual abuse cases occur in child care" (Mazur & Pekor, 1985, p. 11). Where, then, has this negative climate towards physical affection in day care come from? When a person, for example, sees another adult nuzzling the belly of a baby, what factors determine whether the person interprets this behavior approvingly or critically? Recent theories and research in social psychology suggest some hypotheses about how people form attitudes and how attitudes can be changed.

The schema theory of attitude formation seems particularly relevant to the issue of attitudes toward physical affection. According to this theory, humans organize information around cognitive and social schemas (Crocker, Fiske & Taylor, 1984). Beliefs and attitudes are also organized around schemas, which are resistant to change. When a new situation or new information is encountered, individuals assimilate it into their schemas and tend to interpret it so as to support these attitudinal schemas. Thus, the belly-nuzzling interaction would be interpreted in a manner consistent with the observer's existing framework of positive or negative attitudes toward adult-child affection.
Schemas may not be all-encompassing, however. As it is impossible to process all the incoming information, individuals selectively attend to certain aspects which attract their attention (Fiske, 1981). In this selective process, negative information appears to be given more weight than positive in making judgments about persons (Fiske, 1980, 1981; van der Plight & Eiser, 1984). Thus, if a person had been exposed to information about the dangers of too-close physical contact between adults and infants, this might be closely attended to and especially influential in forming judgments about the adult's behavior in the incident described above.

Since attitudes are so resistant to change, how can they be modified? Schema theory suggests, first, that information which is widely discrepant with existing attitudinal schemas will result in accommodation; that is, the schema will change to encompass the new information. Secondly, attitudes can be influenced through manipulating the salience of certain dimensions (van der Plight & Eiser, 1984). For example, Eiser and Mower White (1974) presented adolescents with statements to rate regarding adult authority over children. When given directions emphasizing a pro-authority orientation, subjects tended to rate the statements more positively. When given directions with an anti-authority orientation, they tended to rate statements more negatively. The authors suggested that the results were not merely "methodological artifacts" (p. 91) and speculated that "a major function of persuasive communication may be to render salient certain aspects of an issue as opposed to others, and to provide the listener with a particular frame of reference so that he will interpret the facts presented to him in the manner advocated by the communicator" (p. 92).

An example from the expectancy literature also suggests that attitudes can be manipulated through "feeding" certain background information to subjects as
a context for their judgments (Darley & Gross, 1983). When subjects in this study were given biased information about children's social class backgrounds, they at first reserved judgment as to the children's abilities, but when additional ambiguous information (about the children's test performance) was offered, the participants interpreted the information so as to confirm their initial hypotheses.

Referring back to our earlier example, then, it seems likely that the observer's feelings about nuzzling the baby might be changed if certain aspects of the interaction were made especially salient (e.g., if someone told the observer that babies need to be nuzzled), or if the observer was given certain background information (such as the adult's relationship to the child) which might cause a shift in the person's approval of the affectionate adult behavior.

Using a controlled experimental design, the present study examined the factors which may influence attitudes toward affectionate adult-child behavior. On the basis of recent anecdotal reports and the theory and research discussed above, it was hypothesized that attitudes toward normal physical affection would be negatively influenced by heightened awareness of child sexual abuse and positively influenced by heightened awareness of the benefits of touch and positive emotion. In addition, we expected that physical affection expressed by child care workers would be regarded less positively than affection by parents, especially in the case of males. We were also interested in comparing attitudes of early childhood professionals with those of parents and nonparents.

Method

To study these factors, we showed a videotape of normal adult-child interactions to subjects who included parents, nonparents, and early childhood
professionals. Subjects rated their approval of each of 10 scenes, half of which involved physical affection.

Subjects

Participants in the study were 301 adults, including 88 parents, 127 nonparents (students at a state university) and 86 early childhood educators; subjects were recruited from parent education groups, child care centers, professional organizations, and college classes. Subjects were told that they were participating in a study of attitudes toward adult-child interactions.

Participants in the study were primarily of middle class backgrounds; all had at least a high school education.

Procedure

Subjects were shown the videotape in groups ranging in size from approximately 10 to 50. Seats were arranged so that participants could not see one another's instruction packet and response forms. With larger groups, two video monitors were used for ease of viewing.

Before beginning data collection, subjects had been given a consent form and a brief written description of the research project, framed as a study of "attitudes toward adult-child interactions," in which participants would view a videotape and provide anonymous ratings of its content. The nature of the study precluded a full explanation of its purpose until after subjects had responded to the tape; after debriefing, subjects had the opportunity to withhold their response packets if they preferred. Consent forms and packets were collected in such a way as to preserve participants' privacy.

Each subject's response packet contained a "background statement" which participants were asked to read before viewing the tape. Half of the subjects read:
"Recent publicity about sexual abuse has made physical contacts between adults and children the focus of increased concern. Every day, [parents/day care providers] have many opportunities to touch, hold, caress, and engage in physical play with children. These interactions may have important consequences for later development."

The other half read this statement:

"Recent research on young children's emotional needs has emphasized the importance of touch and warm physical affection between adults and children. Every day, [parents/day care providers] have many opportunities to touch, hold, caress, and engage in physical play with children. These interactions may have important consequences for later development."

Within each group, half of the subjects' statements had the word "parents" inserted (and these subjects were told that the videotape showed parents) while the others read "day care providers" (and were told that the tape showed day care providers). Subjects were randomly assigned to these conditions and were unaware that the response packets contained different combinations of background information.

Next, subjects viewed the videotape. Each of the 10 brief scenes (30-45 seconds each) showed a positive interaction between an adult male or female and an infant or young child. Half of the scenes showed the adult interacting with the child in a physically affectionate way. The other scenes were also positive in tone but contained no physical contact.

Table 1 briefly describes the content of each scene. The scenes actually used on the tape had been edited from a set of parent-child interactions which
had been videotaped in settings chosen to be plausible as either home or day care environments. Sound was edited out of the scenes in order to focus on the physical interaction and to eliminate verbal cues to the identity of the adults on the tape.

After each scene, the experimenter stopped the tape for 30 seconds. Subjects were asked to rate "how much you approved or disapproved of what you just saw" by marking any point on a 100 cm line, from "strongly disapproved" to "strongly approved." After rating each scene, participants had the opportunity to write down brief comments about particular aspects of the scenes that influenced their ratings.

After participants had viewed all 10 scenes, they completed a brief demographic questionnaire including occupation, education, and parental status. Subjects were also asked if they were acquainted with any of the people on the videotapes and if they had prior knowledge of the research project. Data from approximately 15 subjects were not included in the study because of these confounding factors.

Finally, subjects were asked to write a brief summary of what they remembered from the background statement they had read before watching the videotape. In part, this served as a manipulation check. Two judges independently rated these statements for accuracy according to the following scale: (1) no recollection or incorrect recollection; (2) partially correct—correctly recalled the content of either the "adult role statement" (parents or day care providers) or the "touch statement" (benefits of touch or sexual abuse concerns); or (3) correctly recalled both the particular adult role and the particular touch statement he or she had read. Interjudge agreement on these ratings was .83, with disagreements resolved by a third coder.
Subjects were debriefed immediately following data collection. During the debriefing session, the goals of the research project were fully described, and participants were informed about the different background statements which were used. Participants' spontaneous comments indicated that the manipulations were plausible (e.g., those who were told the adults were day care providers believed it and reacted to the adults' behavior in that role). Discussion of the issues raised by the research followed. Printed and verbal information, adapted to the particular audience, was presented on the role of touch and affection in child development, the incidence of child sexual abuse, "facts and fallacies" about sexual abuse, and the prevention and treatment of abuse. Thus, the session was used for public information and open discussion as well as for the more specific purpose of debriefing subjects.

Results

The effects of the four combinations of background information were examined through a series of analyses of variance with repeated measures, using subjects' approval scores for specific types of adult-child interactions as the dependent variables. Data analysis also investigated the influence of the subject variables of sex and group status (parent vs. non-parent vs. early childhood educator) on approval scores.

From subjects' approval ratings for the ten individual scenes, mean scores were derived for: (a) two "male touch" scenes (male adult affectionately touching child), (b) two "female touch" scenes, (c) two "male no-touch" scenes (male adult interacting with child without physical contact), and (d) two "female no-touch" scenes. This data reduction procedure was intended to minimize the effect of responses to idiosyncratic features of individual scenes. The eight scenes used the same adult models in both the touch and no-
touch scenes. Two additional female adult scenes which had been included to
add plausibility to the day care manipulation were not used in the analysis.

Approval scores for the entire sample of 301 subjects were analyzed with a 3
(Group: parents, nonparents, early childhood educators) x 2 (Reading: read
about sexual abuse vs. benefits-of-affection) x 2 (Adult: informed that
videotaped adults were parents vs. day care providers) x 2 (Touch: physically
affectionate scenes vs. no-touch scenes) x 2 (Sex of Model: male vs. female
adult) analysis of variance with repeated measures on the last two factors.
BMDP4V was used for this and subsequent analyses.

Table 2 displays mean approval scores for each cell of the design. The
ANOVA yielded significant main effects for the between-subjects factor of
Reading, \( F(1,289) = 5.57, p<.01 \), and for the within-subjects factors of Touch,
\( F(1,289) = 40.84, p<.0001 \), and Sex of Model, \( F(1,289) = 45.30, p<.0001 \). These
effects will be discussed in the context of a number of significant
interactions involving these and other factors.

Results indicated that those subjects who had read about sexual abuse before
viewing the tapes rated the physically affectionate scenes lower, and the no-
touch scenes higher, than subjects who had read about the benefits of affection
(Touch x Reading, \( F(1,289) = 19.87, p<.0005 \)). As Figure 1 shows, this
interaction is especially accounted for by the no-touch scenes, for which
approval scores were considerably higher after subjects had read about sexual

abuse. Furthermore, the effects of the background readings are stronger for
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those scenes involving male adults than for those in which the videotaped adult
is female (Touch x Sex of Model x Reading, $F(1,289) = 10.03, p < .001$).

Manipulation of subjects' beliefs about the identity of the videotaped
adults also had a highly significant effect on their responses to different
types of adult-child interactions (Touch x Adult, $F(1,289) = 40.56, p < .0001$).
Those subjects who had been informed that the adults were parents rated the
physically affectionate scenes more positively ($M = 72.8$) than those who
thought they were day care providers ($M = 66.6$); conversely, ratings of the no-
touch scenes were lower for the supposed parents ($M = 60.9$) than for supposed
day care providers ($M = 67.3$).

Finally, the analysis of approval scores for the whole sample yielded a
significant Touch x Group interaction, $F(2,289) = 7.90, p < .0005$, indicating
that different subject groups (parents, nonparents, and early childhood
educators) responded differently to the videotaped touch and no-touch scenes.
As seen in Figure 2, early childhood educators gave the highest rating to the
physically affectionate scenes, followed by the parents and nonparents;

insert Figure 2 about here

inspection of cell means in Table 2 shows that early childhood educators gave
high ratings to affectionate interactions even after subjects had read about
sexual abuse.

However, the group effects are complicated by the distribution of male and
female subjects in the total sample. Consistent with the composition of the
profession, almost all of the early childhood educators in this sample were
female. Likewise, the parent group, which was recruited from parent education
classes and attendees at day care parent meetings, was predominantly female.
The nonparent sample, composed of university undergraduates, was the only group
to contain a substantial number of male subjects (47 of 127 subjects). In order to examine the role which sex of subject may play in attitudes toward adult-child affection, a separate ANOVA was conducted using the nonparent sample, with sex of subject as a between-subjects factor. Approval scores were analyzed with a 2 (Sex of Subject) x 2 (Reading) x 2 (Adult) x 2 (Touch) x 2 (Sex of Model) design, with repeated measures on the last two factors.

As seen in Table 3, the pattern of results essentially paralleled that for the entire sample. Figure 3 shows the significant interactions of Touch x Reading, $F(1,119) = 8.33, p<.005$, in which subjects are less approving of physically affectionate scenes, and more approving of no-touch scenes, after they have read about sexual abuse than after reading about the benefits of affection. Significant effects were also found for Touch x Sex of Model x Reading, $F(1,289) = 6.95, p<.01$, and Touch x Adult, $F(1,119) = 7.21, p<.01$. As a comparison of Table 2 and Table 3 shows, the direction of these effects is the same as for the sample as a whole.

However, the analysis also showed that male and female subjects reacted differently to the videotaped scenes (Touch x Sex of Subject, $F(1,119) = 12.58, p<.001$). As Figure 4 shows, male subjects were less approving of the physically affectionate scenes, and more approving of the no-touch scenes, than were the female subjects. These results should be interpreted with a degree of
caution because of the unequal numbers of male (n = 46) and female (n = 81) subjects in the nonparent group.

Because of these significant sex of subject effects within the non-parent group, an additional repeated measures ANOVA was run using just female subjects in the three subject groups. This resulted in a total of 239 subjects: 80 early childhood educators, 78 parents, and 81 nonparents. The purpose of this analysis was to reexamine the variables of interest without the potentially confounding effects of the male subjects' responses. As seen in Table 4, the results of this analysis are essentially similar to those of the ANOVA for the whole sample. Main effects were again found for Reading, $F(1,227) = 6.60,$

$F(1,227) = 16.30, p < .0001.$ As in the other analyses, a highly significant interaction was obtained for Touch x Reading, $F(1,227) = 16.30, p < .0001, \text{ in which subjects were} \text{ significantly more approving of no-touch scenes if they had read about sexual abuse than if they had read about the benefits of affection.}$ As in the analysis for the whole sample, the interaction of Touch x Sex of Model x Reading, $F(1,227) = 84.48, p < .003,$ locates this effect primarily in approval scores for scenes involving male adults, which were more sensitive to the effects of the background information than were scores for scenes using female adult models. The same Touch x Adult results were obtained for the female sample, $F(1,227) = 16.30, p < .0001,$ with parent-child physical affection rated more highly ($M = 74.2$) than day care provider-child affection (67.9), and with no-touch interactions rated higher when they involved supposed day care providers (65.9) than when they involved parents (60.9).
Several group effects emerged even when the male subjects were removed from the analysis. As seen in Table 5, a Touch x Group x Adult interaction, \( F(2,227) = 2.90, p<.05 \), showed a tendency for early childhood educators to rate physically affectionate interactions more highly than parents and nonparents, when subjects thought they were watching day care providers. In comparison to the other two groups, early childhood educators' approval scores for physically affectionate scenes tended to be somewhat less influenced by whether the videotaped adult was thought to be a parent or a day care provider. In response to the no-touch scenes, however, the nonparent group made the fewest distinctions between the "appropriate" role for parents and day care providers, rating scenes approximately the same under both conditions, while the other groups of subjects approved of the no-touch scenes more when they thought the adult was a day care provider. A trend toward a significant Touch x Group x Sex of Model interaction, \( F(2,227) = 2.68, p = .07 \), suggests that responses to the "female touch" scenes particularly differentiate the three groups, with the early childhood educators being most approving of affectionate interactions between female adults and children (M = 74.8), followed by parents (72.4) and nonparents (69.0).

An additional question of interest had to do with factors influencing subjects' recall of the background information they received before watching the videotape. As described above, subjects had been asked to write a summary of this information at the conclusion of the experimental procedure, and these summaries were scored for accuracy. Scores were entered as dependent variables into a 3 (Group) x 2 (Reading) ANOVA. The analysis showed a significant main effect for Reading, \( F(1,295) = 4.26, p<.05 \), with recall being significantly
higher for those subjects who had read the sexual abuse statement than for those who read the benefits-of-affection statement. Analyses failed to show any systematic relationship between recall of background information and patterns of approval scores.

Discussion

The results of this study clearly show that prior information and expectations can influence attitudes toward adult-child physical affection. They also point up the existence of group differences in attitudes toward affectionate behavior. To summarize, the results indicate that (1) when people are attuned to issues of sexual abuse, they are more likely to disapprove of affectionate touching and to favor non-physical interactions; (2) people approve more of physical affection toward children when it comes from a parent rather than from a day care provider; (3) men tend to be less approving of physical affection between adults and children than women are; and (4) early childhood education professionals are especially approving of physical affection, and their opinions are more resistant to manipulation as compared with other groups.

The methodology used in the study was generally successful in highlighting the effects of the variables of interest. Participants were readily engaged in the task of watching the videotape and found the manipulations persuasive. The technique of providing participants with varying information as a framework for judging interactions is one which seems to have potential for studying attitudes toward other types of adult-child behavior.

The physically affectionate scenes were deliberately chosen to be somewhat ambiguous. The subjects' written comments on these scenes show the range of reactions the same adult-child interaction could produce. For example, one scene showed a male adult sitting on the floor reading to a child. His arm is
around her shoulder, and she is leaning comfortably against him. At one point, he gently takes her hand. Here are some extremes of comments on this scene:

"Loving and warm as story is read;" 
"Too cozy—could cause dependency problems. No respect for day care work;" 
"Gave sense of security by having his arm around her;" 
"Child distracted; touch inappropriate."

It is important to note that the average approval scores for all types of scenes was relatively high: all means were over 50 on our 0-100 scale. Participants tended to approve of what they saw. Given the nature of the videotaped scenes, this is not surprising. For ethical reasons, the videotaped adults were not asked to do anything that might be perceived by the children as inappropriate or negative, or which might cause the adults discomfort. Thus both the touch and the no-touch scenes were pleasant and positive in tone, and well within the range of usual, normal behavior. The highly significant results obtained for most of the variables of interest show that, within the rather narrow range of ratings for the scenes, most of the variability in participants' responses can be accounted for by a combination of the effects of our manipulations and subject characteristics.

The manipulations used in the study influenced subjects' attitudes in a way consistent with the schema theory of attitude formation. By providing background reading immediately before subjects viewed the tape, we increased the salience of either the negative (i.e., sexual abuse) or the positive aspects of touch. This salient information then provided a cognitive framework into which participants tended to assimilate the somewhat ambiguous "data" of the videotaped scenes. As the results showed, ratings of these scenes tended to be made in a way that was consistent with what the participants had just read. Schema theory predicts that negative information would be especially salient to subjects. There were some indications that the sexual abuse reading
was particularly powerful. The results of the analysis of subjects' recall of the statements showed that they were more likely to remember the sexual abuse statement than the good touch statement. Furthermore, the greatest effect on approval scores was made by the sexual abuse reading in its tendency to increase approval of the no-touch scenes between adults and children. Although these scenes, like the physically affectionate scenes, were positive in tone, to the objective observer their content appears bland in comparison to the touch scenes. In a number of these scenes the adult is less involved with the child than in comparable touch scenes. It would be a matter of some concern if anxiety over sexual abuse resulted in uncritical approval of a pleasant but detached and somewhat passive style of adult behavior.

The participants' tendency to rate the scenes consistently with the background reading they received can of course be interpreted as an instance of "demand characteristics"—that is, the subjects might have been trying to please the experimenter or give what they inferred was the correct response. However, like Eiser and Mower White (1974), we view our results as more than an experimental artifact. The privacy assured by the procedures, and the fact that the subjects read the background statements independently, may have helped to minimize demand characteristics. Subjects' comments during the debriefing sessions also indicated that they did not regard the readings as a set of instructions. Rather, the readings seemed to alert them to certain salient aspects of the scenes on the tape. The process is analogous to a situation in which a parent may be driving home from work listening to the news on the car radio. She hears a story about a day care sexual abuse scandal. When she arrives at her son's day care center, she sees a teacher affectionately stroking his hair as they wait at the gate. Given the salience of the sexual
abuse information, the mother may be more likely to question or place a negative interpretation on the teacher's behavior.

In the present study, the effects of the background readings are greater for stories involving male adults than for those involving females. This difference probably reflects the fact that sexual abuse by males has been widely publicized both in day care and in family settings. In addition, males are infrequently found in day care positions (one parent commented that it is "not normal" for a man to be a child care provider). Thus many people may have little basis in experience for making judgments about approved male behavior in nurturing situations. This experience gap may open the door to a variety of positive and negative influences on attitudes toward affectionate male behavior.

What are the implications of the findings concerning the effect of these readings on attitudes toward affection? The "bad news" of the study is that reading about sexual abuse tends to decrease approval of normal affectionate touching as compared with non-physical interactions, especially when male adults are involved. However, the "good news" is that information about the benefits of affection is associated with greater approval of physically affectionate interactions. This finding is especially compelling when one considers that the entire manipulation was a three-sentence statement read silently by the participant, in which only one sentence specifically referred to the issue of sexual abuse or good touch. This suggests that more extensive information on the positive aspects of affection would be an effective tool in helping parents and the public at large become more accepting and comfortable with affectionate physical contact as a key ingredient in child development and early childhood education.
Like recent social psychological research (Darley and Gross, 1983), the present study found that background information about the people on the videotape influenced participants' attitudes. People held clear distinctions between approved behavior for parents and day care providers. Overall, participants who thought the videotaped adults were day care providers were less approving of physically affectionate interactions, and more approving of no-touch interactions, than when participants thought they were watching parents perform the same actions. Thus, the public conception of the role of the day care provider does not include the physical nurturance that most early childhood educators see as important in a quality program for young children. There are several possible reasons for this relative disapproval of affection by day care providers. One is clearly the publicity about abuse in day care, which has been so widely circulated that even subjects who were not given the sexual abuse reading may have been cautious about approving of the touch scenes. There may also be a tendency for parents to feel that affection is the appropriate province of parents, but not of "teachers." Working parents in particular may feel threatened by an affectionate relationship between their child and the day care provider. They may feel that the provider's hugs are attempts to win the child's love at the parent's expense. Finally, the recent emphasis on highly academic programs in early childhood may result in a narrower, more academic definition of the role of the day care provider. Accused of "just babysitting," even some providers react by labeling themselves as teachers rather than caregivers and adopting a more formal relationship with children.

Here also is an opportunity for public education. Prior research has indicated that children's attachments to parents are not weakened by day care attendance and that children are able to sustain close relationships with
several loving adults. In addition, parents and others can be informed about the close relationship between emotional security and intellectual competence in early childhood. The ingredients of quality day care, including affective as well as cognitive stimulation, are not generally recognized by parents and policy-makers. This kind of information may be helpful in broadening the definition of appropriate provider behavior.

Although sex differences were not the primary focus of our study, the analysis of the nonparent subsample yielded strong effects for sex of subject in responses to the videotaped adult-child interactions. It is clear that males are less comfortable with the touch scenes, and more approving of non-physical interactions, than the female subjects. This pattern most probably reflects the still-prevalent "macho" socialization of males, and perhaps the sensitivity of males to the sexual abuse issue. These attitudes may also reflect lack of experience with children. Since the males in this analysis were all nonparents, we do not know whether fathers would have a more approving attitude toward physical closeness. Despite their generally low opinion of physical affection, it is somewhat encouraging to note that the male subjects were greatly influenced by the "benefits-of-affection" statement when rating affection by male day care providers. Again, this implies that information may be helpful in clarifying men's ideas about appropriate forms of affectionate behavior.

While men as a group tended to give lower ratings to physically affectionate interactions, early childhood educators gave high marks to physical affection. In contrast to other people, subjects in this group actually gave somewhat higher ratings to the touch scenes after reading the sexual abuse statement than after reading about "good touch." Moreover, their ratings of affectionate interactions showed little difference depending on whether they thought the
adults were parents or day care providers—again in contrast to the overall pattern of results.

In some ways, these findings are counterintuitive. Early childhood educators as a group have been under considerable suspicion because of sexual abuse issues. Questions from concerned parents, insurance cancellations, and personnel issues have touched most members of the profession to some degree. From that perspective, one might expect greater caution in approving of physical affection, especially when the sexual abuse issue is made salient. However, members of this group are usually convinced by training and experience of the importance of warmth and nurturance in child care. Early childhood participants often seemed to regard the study as an opportunity to voice their support for physically affectionate behavior toward young children, despite current concerns and suspicions. This support was reflected in their high ratings of the touch scenes, regardless of the background reading. Despite these ratings, discussions after the experimental sessions revealed considerable tension between the participants' convictions and the day-to-day realities of their work. Many report feeling self-conscious or defensive about their affectionate behavior when parents are observing. Even if their way of relating to children has not changed, their sense of ease about it has.

In various ways, then, all the participants in the study seemed sensitive to the negative interpretations which may be placed on normal affectionate behavior. The results of this research should not, however, be taken as denying the existence of child sexual abuse. Sexual abuse is real. Information on the identification, signs, and treatment of abuse in family and out-of-home settings must remain a priority. However, our discussions with the study's participants revealed widespread uncertainty and misunderstanding about the relationship between potentially abusive behavior and normal physical
affection. One young mother reported that she questioned her own pleasure in holding her naked toddler after a bath. As our results show, many people seem ready to abandon all forms of physical contact with young children in the interests of safety, and to replace warmly affectionate caregiving behavior with a more formal "teacher" role. Fortunately, the study suggests that these attitudes are amenable to change through comprehensive information and public education.
References


### Table 1

**Description of Videotaped Scenes**

<table>
<thead>
<tr>
<th>Scene</th>
<th>Content</th>
<th>Sex of Adult</th>
<th>Touch/No Touch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adult sits beside the child as child builds with construction toy. Adult looks on approvingly; gives encouragement.</td>
<td>F</td>
<td>NT</td>
</tr>
<tr>
<td>2</td>
<td>Adult helps child put tissue in pocket; pats child's bottom. Adult and child exchange hugs.</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>3</td>
<td>Adult catches child as child jumps several times from play equipment. Adult lifts child, hugs, and nuzzles face.</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>4</td>
<td>Adult observes child as child jumps from box to box.*</td>
<td>F</td>
<td>NT</td>
</tr>
<tr>
<td>5</td>
<td>Adult sits on floor with child. Shows child how to use hand puppet.</td>
<td>M</td>
<td>NT</td>
</tr>
<tr>
<td>6</td>
<td>Adult checks infant's diaper as infant lies on blanket. Adult plays with baby's arms and nuzzles baby's belly.</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>7</td>
<td>Adult watches child as child plays on outdoor climber.</td>
<td>M</td>
<td>NT</td>
</tr>
<tr>
<td>8</td>
<td>Adult sits at play table as child prepares &quot;meal&quot; for adult.</td>
<td>F</td>
<td>NT</td>
</tr>
<tr>
<td>9</td>
<td>Adult sits on floor beside child as they look at book together. Adult tickles child affectionately as child lies on floor with head in adult's lap.*</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>10</td>
<td>Adult sits on floor reading story to child seated close beside adult. Adult's arm is around child; holds child's hand briefly.</td>
<td>M</td>
<td>T</td>
</tr>
</tbody>
</table>

*Not included in data analysis; these additional adult scenes were included to add plausibility to the "day care provider" manipulation.*
Table 2
Mean Approval Scores for Four Types of Scenes by Subject Group and Background Information

<table>
<thead>
<tr>
<th>SUBJECT GROUP AND TYPE OF SCENE</th>
<th>Read Sex Abuse Statement</th>
<th>Read &quot;Good Touch&quot; Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Told Adults=</td>
<td>Told Adults=</td>
</tr>
<tr>
<td></td>
<td>Day Care Parents</td>
<td>Day Care Parents</td>
</tr>
<tr>
<td>Parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Actors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>61.4</td>
<td>69.9</td>
</tr>
<tr>
<td>No-Touch Scences</td>
<td>68.3</td>
<td>56.9</td>
</tr>
<tr>
<td>Female Actors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>68.9</td>
<td>73.0</td>
</tr>
<tr>
<td>No-Touch Scences</td>
<td>76.8</td>
<td>65.7</td>
</tr>
<tr>
<td>Non Parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Actors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>60.7</td>
<td>68.5</td>
</tr>
<tr>
<td>No-Touch Scences</td>
<td>70.1</td>
<td>56.6</td>
</tr>
<tr>
<td>Female Actors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>61.8</td>
<td>61.7</td>
</tr>
<tr>
<td>No-Touch Scences</td>
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<td>68.5</td>
</tr>
<tr>
<td>Early Childhood Educators</td>
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<td></td>
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<tr>
<td>Male Actors:</td>
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<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>71.2</td>
<td>68.7</td>
</tr>
<tr>
<td>No-Touch Scences</td>
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<td>60.6</td>
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<tr>
<td>Female Actors:</td>
<td></td>
<td></td>
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<tr>
<td>Touch Scenes</td>
<td>75.8</td>
<td>71.6</td>
</tr>
<tr>
<td>No-Touch Scences</td>
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<td>68.0</td>
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Table 3
Mean Approval Scores for Male and Female Nonparent Subjects

<table>
<thead>
<tr>
<th></th>
<th>Read Sex Abuse Statement</th>
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<th>Read &quot;Good Touch&quot; Statement</th>
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<tr>
<td></td>
<td>Told Adults=</td>
<td>Told Adults=</td>
<td>Told Adults=</td>
<td>Told Adults=</td>
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<td>Day Care Parents</td>
<td>Day Care Parents</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>SEX OF SUBJECT AND TYPE OF SCENE</strong></td>
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<td><strong>Male Subjects (n = 46)</strong></td>
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<td>Male Actors:</td>
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</tr>
<tr>
<td>Touch Scenes</td>
<td>55.9</td>
<td>61.7</td>
<td>69.7</td>
<td>66.1</td>
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<tr>
<td>No-Touch Scenes</td>
<td>74.4</td>
<td>64.6</td>
<td>67.7</td>
<td>59.4</td>
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<tr>
<td>Female Actors:</td>
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<td></td>
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<tr>
<td>Touch Scenes</td>
<td>60.3</td>
<td>59.9</td>
<td>53.4</td>
<td>69.8</td>
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<tr>
<td>No-Touch Scenes</td>
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<td>68.0</td>
<td>73.7</td>
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<tr>
<td><strong>Female Subjects (n = 81)</strong></td>
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<tr>
<td>Touch Scenes</td>
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<td>70.7</td>
<td>67.8</td>
<td>73.3</td>
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<tr>
<td>Touch Scenes</td>
<td>63.4</td>
<td>70.9</td>
<td>66.1</td>
<td>73.9</td>
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<td>71.2</td>
<td>70.0</td>
<td>65.7</td>
<td>69.0</td>
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Table 4

Mean Approval Scores for Female Subjects by Subject Group and Background Information

<table>
<thead>
<tr>
<th>SUBJECT GROUP AND TYPE OF SCENE</th>
<th>Read Sex Abuse Statement</th>
<th>Read &quot;Good Touch&quot; Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Told Adults=</td>
<td>Told Adults=</td>
</tr>
<tr>
<td>Parents (n = 78)</td>
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<tr>
<td>Male Actors:</td>
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<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>62.3</td>
<td>72.3</td>
</tr>
<tr>
<td>No-Touch Scenes</td>
<td>69.6</td>
<td>54.3</td>
</tr>
<tr>
<td>Female Actors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>69.3</td>
<td>77.1</td>
</tr>
<tr>
<td>No-Touch Scenes</td>
<td>77.5</td>
<td>62.4</td>
</tr>
<tr>
<td>Non Parents (n = 81)</td>
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<td></td>
</tr>
<tr>
<td>Male Actors:</td>
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<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>65.5</td>
<td>70.7</td>
</tr>
<tr>
<td>No-Touch Scenes</td>
<td>65.9</td>
<td>64.0</td>
</tr>
<tr>
<td>Female Actors:</td>
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<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>63.4</td>
<td>70.9</td>
</tr>
<tr>
<td>No-Touch Scenes</td>
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<td>70.0</td>
</tr>
<tr>
<td>Early Childhood Educators (n = 80)</td>
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<tr>
<td>Male Actors:</td>
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<tr>
<td>Touch Scenes</td>
<td>69.8</td>
<td>76.7</td>
</tr>
<tr>
<td>No-Touch Scenes</td>
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<tr>
<td>Female Actors:</td>
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<td></td>
</tr>
<tr>
<td>Touch Scenes</td>
<td>75.1</td>
<td>78.2</td>
</tr>
<tr>
<td>No-Touch Scenes</td>
<td>71.6</td>
<td>68.5</td>
</tr>
</tbody>
</table>

Female Subjects only.
### Table 5

**Approval Scores for Touch and No-Touch Scenes**

**By Three Groups of Female Subjects**

<table>
<thead>
<tr>
<th></th>
<th>Told Adults= Day Care Provider</th>
<th>Told Adults= Parents</th>
<th>Told Adults= Day Care Provider</th>
<th>Told Adults= Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Childhood</strong></td>
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<tr>
<td>Educators (n = 80)</td>
<td>70.9</td>
<td>75.3</td>
<td>67.1</td>
<td>60.2</td>
</tr>
<tr>
<td><strong>Parents</strong> (n = 81)</td>
<td>67.1</td>
<td>75.7</td>
<td>67.3</td>
<td>57.2</td>
</tr>
<tr>
<td><strong>Nonparents</strong> (n = 81)</td>
<td>65.7</td>
<td>72.2</td>
<td>63.1</td>
<td>63.3</td>
</tr>
</tbody>
</table>
Figure Captions

**Figure 1.** Effect of readings upon approval scores for touch and no-touch scenes with male and female adult models.

**Figure 2.** Approval scores for touch and no-touch scenes by parents, nonparents, and early childhood educators.

**Figure 3.** Effects of sexual abuse and benefits-of-affection readings on nonparents' approval of touch and no-touch scenes.

**Figure 4.** Responses of male and female subjects to touch and no-touch scenes.
--- read about sexual abuse
--- read about benefits-of-affection

Mean approval scores across different touch scenes.
early childhood educators
parents
nonparents
after reading about sexual abuse

after reading about benefits-of-affection
AA male subjects

6D-0 female subjects

Male Touch Scenes
Female Touch Scenes
Male No-Touch Scenes
Female No-Touch Scenes

MEAN APPROVAL SCORES

- - - male subjects
- - - female subjects

55 - 60 - 65 - 70 - 75

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