In this study, the effectiveness of visually presented maternal stimuli for promoting adaptive behaviors was examined. Subjects were 40 children aged 36-54 months. Toddlers in a standardized playroom were accompanied by either their mother, a silent color motion picture of her projected life-sized, a film of an unfamiliar woman, or a gray light. Children with their mother, whether she was physically present or filmed, played longer than subjects with the filmed stranger or control light. Thus, visual reception alone was sufficient to promote play. On the other hand, using two other measures, no differences between the filmed mother and filmed stranger conditions were found. However, post-experimental interviews revealed that 40% of the children shown the filmed stranger mistook her for their mother. A re-analysis of these data demonstrated that the children who misidentified the stranger played and explored more often than those who correctly identified her. These findings imply that any visual stimulus complex which is perceived as being the mother may be sufficient to promote adaptive responding in a novel situation. (Author/MS)
Title: Visual presentation of mothers for facilitating play in children: The effects of silent films of mothers

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Although many parameters of maternal attachment have been investigated, documentation of the means by which the child perceives the mother is limited. Early research (e.g., Harlow, 1958) has provided evidence that tactile stimuli imparting "contact-comfort" are of major importance for the formation of attachments in monkeys. Studies with humans (e.g., Schaffer & Emerson, 1964) also indicate the necessity for close physical contact in some children. While adapting to an unfamiliar environment, almost all of a sample of 1-year-olds touched their mother frequently (Rheingold & Ecker- man, 1969). Touch has also been noted in explanations of older children's attachments to stimuli other than the mother, e.g., to security blankets (Passman, in press; Passman & Weisberg, 1975). However, while demonstrating that blankets and mothers equally promoted play, exploration, and non-distress in a novel environment, Passman and Weisberg (1975) found that few 2- and 3-year-olds actually touched their mother or blanket. Also, even when physical contact with mothers or blankets was not possible, their presence nearby facilitated discrimination learning (Passman, in press). Thus, using distance receptors (Bowlby, 1969) to contact the attachment object appears to be sufficient to facilitate these behaviors in toddlers.

If mothers can be presented so that they are perceivable only visually, the functional properties of mothers' visual characteristics can be examined. The purpose of this study was to investigate whether films of mothers could promote adaptive behaviors in toddlers.

Forty children aged 36 to 54 months were randomly assigned to one of four conditions. They individually entered an unfamiliar playroom accom-
panied by either their mother, a silent life-sized projected color film of her, a similar film of an unfamiliar woman, or a gray control film of equivalent illumination. In the playroom which contained three toys, subjects were observed for five minutes.

Statistical analyses revealed that children with their mother played with toys significantly longer than children with the filmed stranger (p < .005) or gray control film (p < .005). Likewise, with their mother on film, subjects played longer than with the filmed stranger (p < .005) or control film (p < .005). Notably, children with the film of their mother did not differ significantly from those with their mother actually present. On two other measures, frequency of playing with toys and frequency of locomotor activity, children with their mother also obtained higher scores than those with the stranger or control films (ps < .05); however, the filmed mother and filmed stranger conditions did not differ. Since four of the ten subjects presented with filmed strangers misidentified the stranger as their own mother during a post-experimental interview, phi coefficients were calculated. Significant correlations were found on these measures between misperceiving the stranger and obtaining high scores (ps < .01); thus, children who misidentified the stranger played and explored more than those who did not.

Although several sense modalities may be used to contact mothers when they are present, vision was the only modality which the children could have used to perceive the films of their mother. Hence, the visual presentation of an attachment object, by itself, is sufficient to promote play. A related explanation encompasses stimulus generalization. If the mother's presence is a discriminative stimulus for various attachment behaviors by the child (e.g., Gewirtz, 1972), generalization to similar stimuli should
occur. Since films of mothers are more like the actual mother than films of strangers, filmed mothers were more effective in promoting adaptive behaviors. Paradoxically, misperception of nonmaternal stimuli produced an effect similar to that caused by the films of mothers. The findings from children mistaking a stranger for their mother suggest that any visual display which might be perceived as the mother may suffice to promote adaptive responding.
References


