This research study examined ways in which exposure to a children's television show (Misterogers' Neighborhood) would enhance the spontaneous imaginative play of children after several weeks. The project, which is detailed extensively elsewhere, involved a comparison of three groups of preschool children in a day care center who either: (1) watched Misterogers daily for two weeks in a group; (2) watched Misterogers with an adult serving as a kind of intermediary and translator; or (3) watched no television but engaged in make-believe exercises with a teacher. Additional investigative procedures involved regular meetings with the parents which afforded the opportunity to obtain data on television viewing habits and on personal attitudes toward sex role in child rearing and toward the personal and social self-worth of the parents. A second phase of the investigation involved observing the children during the Misterogers programs to see what kinds of materials held their attention. Finally, intervention procedures included the establishment of parent groups that met through the following year to provide help in learning to use the television medium more effectively. Findings for each phase of the project are discussed, and implications of the study are presented. (SDH)
Family Television Viewing Habits
and
the Spontaneous Play of Pre-School Children

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In most families in this country and, increasingly,
throughout the world, it can probably be said that television
is indeed very much a member of the family. Surveys suggest
that in most homes where there are young children, from
toddlers to early adolescents, the television set is on much
of the time during the day and well into the night and is
viewed with different degrees of concentration by all members
of the family. Like an imaginary companion, "Big Brother," it is there providing stimulation and talking to the smallest
child in a way that has never been a part of human experience
before. Viewed from this vantage point, it seems almost a
national disgrace that so little attention has been paid by
appropriate governmental or private agencies to the direct
impact of the television set on the socialization of children.
The major thrust of formal research until fairly recently has
been to examine possible influences of television upon overt
aggressive behavior. The relevant reviews of this literature
that exposure to aggressive material on television will have the effect of increasing the level of aggression in children, particularly those already showing tendencies toward overt aggressive behavior. The serious implications of such findings are clear but have not yet been fully faced by either the networks or various mental health agencies. If only 20% or 30% of all pre-school children show a predisposition to aggressive behavior in the sense of being inclined to direct physical attacks on other children, the extensive exposure of such children to the large amounts of direct violence on television, whether in cartoons or live form, is likely to generate a sizeable upsurge in the occurrence of acts of overt violence by these children in the short run at the very least. This certainly constitutes a national mental health problem and one that calls for serious attention. We should like also to point out more subtle and as yet relatively little studied effects of aggressive material on television. The spate of detective and police shows on television while generally representing the side of law and order, almost always end up with the good guys shooting the bad guys to death. Obviously the writers' intentions are merely to wind the story up quickly and dramatically but the message in many subtle ways is being communicated to the vast millions viewing that it's okay for the police to shoot down "alleged perpetrators" rather than go through all the trouble of arresting them and bringing them to trial.

Our primary concern in the present paper is to examine
more extensively possible ways in which the television medium may be put to use for what might be termed pro-social or constructive social goals as part of the overall socialization process. The presentation here represents essentially a case report on a two-month experience with the children and parents of a day care center in a small industrial city in Connecticut with then subsequent follow-ups carried on over almost a year as part of consultation to the parents of the center. The major focus of our intervention was the study of spontaneous imaginative play shown by the children during the course of the free play periods in the day care center. The position we took and which will not be detailed here at length was that while all children show a certain amount of pretend or make-believe or socio-dramatic play as an inevitable part of cognitive growth, what Piaget called ludic symbolism, there are interesting differences in the extent to which children engage in such games and interesting consequences for children of the differences in predisposition to imaginative play. For example, a study carried out by Biblo (Singer, 1973) indicated that children already predisposed to make-believe and fantasy play showed less likelihood of aggressive behavior when frustrated and also after viewing an aggressive television show. Children more predisposed to aggressive play were somewhat inclined to increase the level of aggression following the exposure to the aggressive TV presentation.

The major thrust of our research study was to examine the ways in which exposure to children’s television show, specifically Mister Rogers’ Neighborhood, would enhance the
spontaneous imaginative play of children after several weeks of exposure and would also perhaps increase the level of positive emotionality in the course of play. Briefly, the formal experiment itself which has been extensively described elsewhere (Singer & Singer, 1974) involved a comparison of control group with children watching Mister Rogers daily for two weeks in a group, a second group watching the same program but with an adult serving as a kind of intermediary and translator, and the third group which viewed no television but was provided with a live adult teacher who engaged in a variety of make-believe exercises with the children. The results of this study indicated pretty clearly that exposure to the live adult model had the largest impact on increasing the spontaneousness of the behavior of the children as measured in post-experimental free play periods. Exposure to the Mister Rogers show with the adult intermediary showed the next largest increment, while mere exposure to the television show alone (particularly since the show is slanted at the individual child and there were fifteen viewers in the group) led to only more small increments in make-believe play. By comparison, the control group children showed, if anything, a drop in the occurrence of make-believe play over a six-week period.

In order to carry out this investigation, we felt that it was important to involve ourselves and our staff of eight raters who were unfamiliar with the experimental hypothesis as fully as possible with the school and its director to establish a sense of rapport and to provide the parents with
as much opportunity for informed consent concerning their children's participation in the study. This, therefore, included regular meetings with the parents before, during and subsequent to the experimental phase of the study. These meetings afforded us the opportunity to obtain data by the use of questionnaires on television viewing habits and on personal attitudes towards sex role in child rearing and towards the personal and social self worth on the part of the parents.

While we do have more formal statistical data, our approach in this presentation will be concerned with the general qualitative indications that emerge from our contact with approximately seventy parents whose children attended the day care center. The families involved were all in their twenties and thirties and might be classified best as American-ethnics. That is, they represented persons working in blue-collar or lower level white-collar positions with strong sub-cultural ties to Italian, Ukrainian, Polish and Irish backgrounds. In most cases the mothers worked at least part time and viewed the day care center as an absolute necessity. Following are some of the more general outcomes that emerged from the questionnaire responses describing children's and family television favorites and extent of viewing. Our data also included self-ratings on child rearing attitudes, sex role, and a particularly interesting measure of personal and social self worth, an adjective check list based
on the work of Carlson and Levy (1968).

The general indications were that these families tended to view by far the most popular television shows such as "All in the Family," "I Love Lucy," and the various popular detective/police shows such as "Mannix," "Kung Fu," etc. A typical family pattern involved the children's viewing of television in the late afternoon on return from school and staying up relatively late so that many of the children viewed a number of the prime time more aggressive television shows, generally in the company of their parents. One mother who by many standards would seem to have been more educated nevertheless reported gleefully how much she enjoyed watching "Creature Features," a monster movie show, with her four-year old. Because of the nature of the location of the city, educational television was not easily available and so most of the parents and children have never seen Mister Rogers nor Sesame Street, although they had heard a little bit about these shows, and, as our research went on, parents quickly began to at least say the right things about the value of this type of programming. It seemed quite clear initially that the major import of our survey and interview with the parents was how little thought or attention these basically well intended and responsible parents paid to the content or extent of television viewing by their children.

When we divided the groups into those whose children showed a greater amount of spontaneous imaginative play compared with those whose children showed the low median scores
on spontaneous make-believe play, we found interesting differences both in the mothers' self-reports of style and the quality of television programming viewed in the family. On the Self-worth checklist, for example, the mothers of those children who showed more imaginative spontaneous make-believe play tended to significantly more often rate themselves high in Personal Self-worth rather than Social Self-worth. They rated themselves higher on traits such as "ambition," "confidence," "creative," "energetic," "fair-minded," or "idealistic." The mothers of the children who showed significantly less spontaneous imaginative play were more likely to have rated themselves high on variables such as "attractive," "compassionate," "considerate," "cooperative," "friendly," "generous." If we then looked at the television viewing patterns, we found that the parents of the less imaginative children reported both the child's favorite programs and their own as involving aggressive or violent components. Programs such as "Daktari," "Hogan's Heroes," "Kung Fu," "Gunsmoke" were more likely to be the favorite viewing of both parents and children where the mothers reported higher Social rather than Personal Self-worth scores and also where the children showed lower spontaneous imaginative play.
In other words, there seemed to be a general configuration that emerged in our admittedly small but fairly intensively studied sample. Mothers whose self orientation was built around major emphasis on independence, thoughtful or internally oriented values tended in some subtle way to communicate this pattern to their children. As other researches we have carried out suggest mothers foster make-believe play through storytelling, and through allowing the children privacy. In addition, such mothers tended to take a more active role in monitoring the TV viewing habits of the children and placed greater emphasis on programming that was less likely to be directly aggressive or violent. Parents whose self-worth orientation was built more around their relationship to others tended to be less supportive or fostering of imaginative play in their children and also tended to be less concerned about the quality of programming that children viewed or about the likelihood of the children's exposure to aggressive content.

The second phase of our investigation involved watching the children more directly in their response to various of the *Misterogers* programs to see if we could get some clue as to the kinds of materials that particularly held the children's attention. Viewing in a group as large as fifteen is not the ideal situation for the *Misterogers* program, quite frankly. *Misterogers* himself talks directly to the individual child, one presumably viewing alone or with one or two others in a home atmosphere. At the day care center, the groups of fifteen
were naturally more restless and less able to concentrate at the slow pace of a program like the **Misterogers** one. Nevertheless the level of concentration was moderately high for three and four year olds for all of the programs. Particularly effective were programs that involved make-believe animals and puppets. What seemed clear was that the building of tension and indeed even moderate aggression as in the "Jack in the Beanstalk" puppet show that took up part of one of the programs will hold attention, produce positive emotional reactions that can be easily recorded and will reduce the likelihood of overt aggressive behavior in the children. For groups as large as this, the more low-keyed programs such as the one that dealt with books and reading while stimulating a good deal of imaginative play in the children during the program itself failed to hold their attention to the set and in that sense was somewhat less accessible for this type of large audience. Our experience based on analysis of the pattern of the children's behavior as observed by raters during each of the programs used suggests that there are distinct advantages to the use of television with an available adult intermediary as part of day care or nursery facilities provided that the viewing groups are limited to perhaps no more than six and ideally three or four. In settings such as those with the adult initially present and then gradually phasing himself or herself out the gentle message of **Misterogers** and the stimulating quality of his Neighborhood of **Make-believe** for imaginative play seems decidedly to be an important positive way in which television can have an
impact.

A final phase of this modest form of community intervention included the establishment of parent groups that met through the following year under the direction of one of the authors. What emerged amongst other things from these group meetings with parents was the sense that modestly-educated young parents are eager for help in learning how to use the television medium more effectively. They're not always sure that they can control the set. The inevitable family fights over viewing of sports activities necessarily emerge. Nevertheless there seem to be considerable interest in the possibility that help might be forthcoming in deciding on what might be the most appropriate types of television shows for various age levels of children. Parents also needed help with facing some of their own social attitudes. For example, the low-keyed gentlemanly Misterogers was perceived by many women and particularly those who took a strongly traditional feminine orientation on one of the scales we employed of sex role identification as being perhaps too "effeminate;" they felt it wasn't a good idea to expose their sons to this type of programming. It was clear that parents need help in understanding the difference between homosexuality and gentle humanity. For this group of parents anything that smacked of homosexuality was terribly distressing and it required some help for them to see that whatever their prejudices might be they were irrelevant to the quiet and thoughtful approach that Misterogers took to the children. But it became quite clear to us in the course of
the study that even relatively "liberated" women were inclined to feel that their sons would be in some way distorted in their growth if they were not exposed to vigorously active or aggressive male figures on television. Perhaps one implication of our experience with this group around the Misterogers show was that if women's liberation is to become a reality in the more ideal sense, women are going to have to pay more attention to accepting the gentleness in their own sons and to preparing them for more of the tenderness and sensitivity that in the past has been so exclusively emphasized for women.

IMPLICATIONS

The general implications of our experience in this particular mixture of formal experiment with community intervention on a small scale has led to some important directions we feel research ought to go in the future. We believe that it is quite feasible to study the ongoing viewing patterns of children to a variety of programming and to rate the children by the use of trained observers on a variety of affective reactions as well as indications of degree of concentration and overt aggressiveness. We believe it is desirable to compare the pattern of viewing and enjoyment of particular programs with response to other programs and also to examine the subsequent outcomes in spontaneous play behavior of persistent viewing of a variety of programs. One obvious question we have has to do with the differential impact of shows such as Misterogers with more popular and better known Sesame Street. There seems
little question that the quick cut and lively theatricality of Sesame Street may hold children's attention more, particularly if viewed in groups. What remains to be studied more extensively is the degree to which the "message" whether cognitive or attitudinal is grasped by the child. Recent studies of the use of the Fat Albert spots by children indicated that techniques are available for evaluating the degree to which the particular pro-social message may be grasped by a youthful audience. It would seem that little by little psychologists will have to take the trouble to evaluate the socialization impact of widely viewed programs and use this information to feed back suggestions both to parents and producers.

Another implication that grew clearly out of our contact with the parents in the group was the desirability of building into either regular clinical or educational facilities or to consultation programs for parents of children in nursery schools, kindergartens or day care centers some regular system of obtaining information on parents' viewing habits and then feeding back to the parents suggestions on approaches to monitoring the TV to viewing the television closely with children and serving as intermediaries or translators. Parents also need to learn methods of clearly limiting the children's exposure. Many parents were genuinely surprised to realize that allowing children to view late night shows might actually increase the possibility of nightmares or overt aggressive behaviors for some of them. Once confronted with some of the research evidence in this connection or with the reasonable alternatives
available, parents seemed only too eager to rethink their approach to
the children's viewing habits.

One of our theoretical hypotheses that as yet bears more intensive
testing has to do with the possibility that children who have been
encouraged to develop more extensive imaginative play tendencies are
likely to be less influenced by negative content and more capable
of integrating pro-social messages perceived from television. It
remains to be seen whether this hypothesis can be supported in more
formal research, but it appears to us that there is a whole variety
of questions of this kind that need to be asked about the interaction
of predispositional variables, general parental atmosphere and the
response to specific pro-social types of television content. (See appendix).

In conclusion, our position based on this and related experience
in observing pre-school children and their response to teaching and
television viewing is that there is still a tremendous opportunity
for increasing the scope and flexibility of socio-dramatic and
imaginative play in most children. Television provides both an
exciting viewing situation and interesting and elaborate content which
can later be incorporated by children into make-believe play. The
problem is that what tends to get incorporated by many children are
the more violent aspects of the television content since those
are so much the focus of the adult oriented programming to which
we found so many really young children exposed. Our position is that
interesting and elaborate make-believe themes using both realistic
and puppet or fantasy characters abound in life and these can be
used in programming or in direct make-believe training for children
so that they can be incorporated into the play behavior of the children
subsequently. Such imaginative play along with some of the other pro-social kinds of exposure such as the cooperativeness or positive alternatives to aggression in frustration situations that have been dealt with by Stein and Friedrich (1973) seem to us important parts of socialization for all children. Rather than approaching television which is clearly here to stay as a member of our family with negative attitudes either of censorship or helpless scorn we believe that it is up to psychologists to examine the parameters of the child's imaginative capacities and then find ways in which systematic viewing with adult help can enhance growth possibilities in a variety of constructive areas.
References


Footnote

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APPENDIX

The Components of Research on Television and Children

Jerome L. Singer and Dorothy G. Singer (1973)

I. Which processes related to TV can we measure

A. Attention of child to content
   1. Looking behavior
   2. Ongoing behavior
   3. Restlessness or diversion from screen

B. Affect of the child while watching and after
   1. Ratings of emotion of expressiveness
      (TV monitor of face--e.g., Ekman)
      Motor tendencies--thumbsucking, gestures, masturbating, sleepiness or boredom, anger
      e.g., evidence of fear as well as aggression or enjoyment
      Mixed emotion--approach-avoidance or puzzlement
   2. Affect after watching
      e.g., liveliness, restlessness, attitude toward following program
   3. Interaction with other children and with set (Mr. Rogers on screen) vs. child alone and with adults [their role]
   4. Predispositional variables--High vs. Low anxiety children, High Fantasy vs. Low Fantasy children, Aggressive vs. Nonaggressive, boys vs. girls, age and stage levels and affective reaction
   5. Imitation as a function of positive or negative affect vs. neutral
   6. Does liveliness hold interest in itself or must there be conflict, danger, aggression, cognitive disconfirmation or novelty, suspense

C. Cognitive elements
   1. Level of language usage
   2. Complexity of stimuli
   3. Children's comprehension of content
      [modeling cues - acquisition - imitation/disinhibition/counter imitation]
4. Measures of concept formation and cognitive levels at outset--age levels--predispositional variables (Boehm test)

5. Changes in convergent and divergent processes [Piagetian notions--animism, conservation] cognitive aspects of humor

II. Outcome measures

A. Cooperative

1. Retention of material

2. Generalization and conceptual level

3. Insights into conflicts; self-awareness and body image and reality vs. fantasy

4. Symbolic transformation (e.g., emergence in dreams or spontaneous play)

5. Vocabulary and language changes and communication (verbal and nonverbal) [Meichenbaum studies on reflective and impulsive children] [Smilansky--critical and injunctive vs. descriptive] Self-references and alternations of role

6. Imagery evidences--Reyher's semantic elaboration

7. Competence and mastery level; task persistence

8. Organization--structuring capacity

B. Affective

1. Joy and interest--positive affects, humor and playfulness

2. Modifications of anger and alternatives to aggression--modeling of coping mechanisms in conflict situations

3. Fear reduction--dentist, doctor, animals, hair cuts, dark sleep, separation, strangers

4. Tenderness, loving-warmth and love for animals, open affection

5. Empathy, identification of own and others' emotions

C. Socialization

1. Cooperative behavior
2. Sharing [Liebert's modeling and cooperation]
3. Change in "ethical" level
4. Self-control and delay
5. Competence and mastery level
6. Sociodramatic play--role playing and role reversal
7. Tolerance for self and others--racial, handicapped

III. Parent and teacher training

A. Delineation of major training areas
1. Awareness of cognitive level differences, e.g., vocabulary, grasp of situations
2. Awareness of stages in social development
3. Identification of conflicts and negative affects
4. Communication of positive affects
5. Awareness of environmental reinforcement contingencies (careful observation)--monitoring behavior

B. Specific training
1. Role playing of techniques for conflict resolution or reinforcement
2. Imaginative games
3. Expression of own positive affect and awareness of own styles--touching and physical contact
4. Developing specific dependency or independence
5. Preparation for specific life situations
   a. Separation and attachment
   b. Sibling rivalries
   c. Need satisfaction and delay of gratification
   d. Doctors, dentists, operations
   e. Refusal to eat, toilet training, sleep resistance, regressive behavior, temper tantrums, social withdrawal, shyness, timidity, sadness
g. General and specific aggression situations
h. Natural phenomena--storms, dark
i. Phobias and compulsions
j. Development of competencies and failures (e.g., athletics)