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CHILDREN'S REACTIONS TO MOVIE HORRORS AND RADIO CRIME

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BEING startled many times by the terror inspired in children by motion pictures and radio programs, the writer studied the reactions related by 200 children, normal physically and mentally, in the responses given to an emotional inventory which had been designed to detect maladjustments shown in the various aspects of child life, and, in so doing, was struck by the number of phases revealed which would be of interest to pediatricians. A full history of each child had also been given by the parent.

There were 120 boys and 80 girls in the series, from 6 to 16 years of To afford a better number for comparisons of physical effects, the last ten of the consecutive cases were dropped and their places filled by ten additional children who had subsequently happened to come into clinic or private practice by the time of writing, and whose lot it had been to escape "bad" movies and radio entirely. This raised the total of fortunate children to forty-seven, a group which proved to be fairly homogeneous in reaction. The descriptive word "bad" has been adopted from the children's vocabulary, evidently meaning to them those with a bad effect; some used "scary" in the same way. In this group of forty-seven, three boys and four girls had never seen a movie (one of 8, three of 9, one of 11, and two of twelve years). Ten did not see a movie until 10 to 13 years of age (three of 10, two of 11, two of 12, and three Twenty-nine had no bad movies or radio programs in of 13 years). their experience, and one saw no bad movies until after twelve years of age. In addition to the forty-seven mentioned, there were also four who had seen only good movies but who were addicts of radio crime programs.

In classifying groups, the word "addiction" has been used in the medical sense, as giving oneself over to a habit-forming practice very difficult

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to overcome, no matter how the aftereffects are dreaded. With this in mind, the addiction was divided into three classes: severe addiction (movies two to five times a week and many of the crime programs); moderate addiction (movies one to two times a month and one to two serious crime programs like "Calling All Cars," "Gangbusters," "Behind Prison Bars," etc.); mild addiction (several times a year and milder crime programs like the "Lone Ranger"). In most cases, the degree of radio addiction matched that of movie attendance, although there were twenty-three who were allowed to see bad movies but restricted to good radio programs; while, on the other hand, there were the four mentioned who saw only good movies but listened to the worst This grouping gave 114 (57 per cent) as severe; radio programs. twenty-five (12 per cent) as moderate; and fourteen as mild, including the four with the bad radio only. The forty-seven nonaddicts complete the number of 200.

In general, it was found that movies and radio serve not merely as recreational outlets, often used because of lack of resources within the family life, but that among given layers of society, movie attendance, like the possession of an automobile in higher layers, definitely bestows social prestige; the more a family can go, the higher the social status. The number of radios owned is stated proudly, especially if each parent and each of the two or three children owns one. In certain social layers, the children on Saturday or Sunday, or both, are dressed in their best, given from five to twenty-five cents for candy, and sent off early to parade up and down the aisles and from seat to seat, ostentatiously licking the candy and holding it so all may appraise its value. wonders how the old Sunday school attendance has fared. Even at school, children lose face if they cannot discuss the hair-raising details or act out the goriest murders on the playground. Then, too, getting the children from under foot by parking them in a show gives marked relief in small living quarters, especially if they stay from noon until dark, as is not uncommon. In poor families, on or off relief, in which a radio, shows, and permanent waves seem to be considered necessities (although those at the lowest end of the self-respecting, self-supporting populace are largely deprived of them), the whole family is dragged along to the movies, since there is no money left to pay for someone to stay with the children at home. Nor can Father be denied his thrills from crime programs, even if they penetrate every nook of the small Movies and radio seem to have apartment until after 11 at night. sapped the family resources for entertainment; games, handiwork, reading aloud, and so on, seem unknown relics of the horse-and-buggy days.

Naturally, the effects of addiction were found to vary in different children, whether expressed by the general health, nervousness, sleeping, eating, thinking, fears, and so forth, or with an overlapping of fields. Neutralizing agents were found to be a good physique, a comforting security in the home, a satisfying relationship with one's own fellows, and a desirable success in the school world. A powerful factor in intensifying the effects of movie horrors and radio crime is the ability of the child to take on the action he is seeing or hearing as his own, by sympathetic participation in the experience of the screen or radio person. That there is vicarious indulgence in love by women and in sports by men is common knowledge. In their dreams and fears, children disclose that they, too, partake in varying degrees in the activities portrayed, and, as later examples will illustrate, the victim seen or heard in the terrifying situation becomes the self and the other victims become the members of the family, as the scene is relived. To represent what the child's mind does with the indigestible mass forced into his mental craw, the following dreams of 9-year-olds are given:

- 1. "I see snakes and spiders in the dark like those in the movies and they let a poison snake loose on a train from a box and it bit a man and he died."
- 2. "I often dream crocodiles are all around me and after me and I have to jerk and jerk all over the bed to get loose from them."
- 3. "I dream most of 'Clutching Hands,' where the window opened very slowly and a lot of hands came in and kept clutching until they got to the lady's neck and choked her and then pulled her out of the window and it felt like me. I always dream mostly about dead ones like those they drug over and pressed a button and threw them down a cave."
- 4. "My last dream was about training lions in Africa for my circus and some bad men came and gave them dope and then they killed me."
 - 5. "I dream mostly of choking girls' necks."
- 6. Little girl: "I dream about tribes of black men that catch a pretty girl in a trap but a white tiger comes and eats her up and I think it's me."
- 7. "I've dreamed many times that they caught me and put me in the electric chair like in 'Angels With Dirty Faces.' And I've screamed and screamed over it and in the 'Haunt Came Back."

General Health.—While notes had been taken as to the state of nutrition, color, physique, and the rest, and this had been combined with other information in the questionnaire and from the parents, the evidence was too indefinite to tabulate, although it seemed to give the nonaddicts a 35 per cent lead in satisfactory health conditions. The following excerpts show that a general effect can follow the arousal of emotions:

1. Nine-year-old girl: "I always scream if they knife somebody. Sometimes I get so scared my stomach hurts. In the night I know someone is coming in the back window, the way they do in shows and I can hear someone creeping around the room in the dark. There is always skeletons in the corners. I get excited when there is a war picture and I say to myself, 'Get 'em, boy; get 'em, boy.'"

2. Eleven-year-old boy: "I worry that strangling might happen to me. I know a boy and a kidnapper chased him all the way home and he was so scared he was sick in bed for days."

Nervousness.—This was judged by objective evidence during the hour's interview with the child. The extreme degree of nervousness was distressing to witness; some were shocking. At times a desire would arise to throw a switch of some kind to cut off the numerous jerks, twitches, and tics, in order to have a breathing spell during the hour.

A total of 116 of 153 addicts (76 per cent) showed more than ordinary nervousness, while nineteen of the forty-seven nonaddicts (40 per cent) did, an improvement of 36 per cent for nonaddiction. Of the 116 addicts, sixty (52 per cent) showed +++ nervousness as against two of the forty-seven nonaddicts (4 per cent), a lead of 48 per cent for nonaddiction. Thirty-two of these addicts (28 per cent) showed ++ nervousness, as against four of the forty-seven nonaddicts (9 per cent), a lead of 19 per cent. Of the sixty with +++ nervousness, thirty-nine (65 per cent) were severe addicts, while of the thirty-two with ++ nervousness, seventeen (53 per cent) were severe addicts. Excerpts, one for each age group, follow as illustrations:

- 1. Seven-year-old: "I always wring my hands at movies. I've got a radio of my own and I can listen to all the police calls,"
- 2. Eight-year-old: "Sometimes I shake all over and my hands jerk and I bite my nails way down when radio or movies are bad."
- 3. Nine-year-old: "I get scared at the radio and I bite my nails and when there is shooting, I shiver and shiver and jump on the chair and fight with my hands and run to the window to see if it's coming. I get very nervous, excited. Spooky things on the radio make me too much of a scaredy and when Papa comes in, I think he is a ghost and I run and fell over the chair and broke the top and Mama say, 'Who break this chair,' and I say, 'Mama, will you hit me if I tell you?' "
- 4. Ten-year-old: "Spooky ones are best and gangsters are really good but I hate love ones. When I saw 'Dracula's Daughter,' I jumped right up and yelled out in it and had nightmares nearly every night after."
- 5. Eleven-year-old: "I can't go to shows at night, because I can't sleep afterward. I get too excited and nervous anyhow when the crooks start shooting."
- 6. Twelve-year-old: "Oh, gosh, but I get jolted by mysteries! I am a nervous wreck afterwards—spookies the same. Killings get me awful nervous. When I listen to Gangbusters, I get all jittery. I still have nightmares and, if I am alone, there is always a robber in the house and I know he will jump on me if I go in the kitchen. Men are always creeping up on me in the bathroom and when I am going to sleep, I know that the crooks are under the bed."
- 7. Thirteen-year-old: "Some movies make me so nervous and jittery, I forget my way home."

Sleeping Disturbances.—These were easy to gather as the children attach no importance to their night terrors, nightmares, and night walking. Nor did they mind telling their fears in the night to a noncritical, sympathetic person. Becoming so terrified that they had to go to the mother's bed or screaming from fright until the mother had to waken them were common reactions up to 12 years of age. The other very common reaction occurring at almost any age and interfering with sound sleep was that of pulling the covers over the head, burying the head under the pillow, or diving under the covers clear to the foot, with or without pillow, there to spend the night. With oxygen intake so restricted, one wonders how refreshing such sleep can be, to say nothing of the effect of the night terrors, night walking, and nightmares recorded.

A total of 130 of 153 addicts (85 per cent) showed sleep disturbances, as against nine of forty-seven nonaddicts (19 per cent), apparently an unnecessary, preventable 66 per cent of sleep disorders. Of the 130 disturbed sleepers in the addicts, 105 were disturbed to a ++ or +++ degree (81 per cent), as against five disturbed sleepers in the nonaddicts (11 per cent), a difference in favor of nonaddiction of 70 per cent.

The following are excerpts illustrative of sleeping disturbances at each age level:

- 1. Seven-year-old: "After a spooky, I dream a lot and wake up and can't go to sleep and have to get out of bed and go to Mother."
- 2. Eight-year-old: "Ghosts and robbers, like in the show, seem to be around me when I am alone and I have to put my head under the pillow and go to the bottom of the bed; and I hear the closet door open and men with guns and kidnappers creep around. I dream such bad dreams that they wake me up and I have to go to Mother's bed, but I've got used to murders now but I still dream of people getting killed in crashes and everything going red."
- 3. Nine-year-old, a dainty, little girl: "I have dreamed millions of times of people getting hurt, killed, shot, hit over the head or stabbed. My last dream was that the neighbor lady went home and found her husband in a closet with a knife in him. I have terrible dreams. It's awful."
- 4. Ten-year-old: "The worst movie I ever saw was about a lady with smallpox and she went around and gave it to everybody and you saw them die. When I am alone, I think of how thieves take children in the movies and I don't know what to do. In the dark, I see eyes looking at me and men with guns and big dogs and a man stands in the door and I feel somebody under the bed and there is a noise in the closet. I have to lie awake a long time."
- 5. Eleven-year-old: "I go to shows two times a week, sometimes more. I kick and talk in my sleep afterwards and have to sleep with Mother because I walk in my sleep so much. I can't go to the movies at night because I can't sleep afterwards. I hate war and spooky pictures and

get too scared when it's like the 'Slave Ship' and the 'Old Soak.' I still dream about the one I saw four years ago where the man cut the lady's head off and carried it around. I dreamed a long time about the woman who came up out of the ground and killed people. I usually dream of a lady and men killing, the drunken type, you know. I had one dream I dreamed over and over about a guy that cuts heads off. I had to think of that in the daytime, too, it made me feel so leery and scared. I sometimes see a lady or a man dying in my dreams.

6. Twelve-year-old: "I couldn't sleep for several nights after the 'Mummy' and the 'Invisible Ray,' and I was scared in the daytime for fear the guy in the 'Invisible Ray' was doing things in my house."

Eating Disturbances.—These data are the least accurate, as mealtime has become a highly charged battleground with fusillades and bombardments of arguments, culled largely from high pressure advertisements and pseudopsychologists' warnings not to correct the child at the table or digestion will stop instantly. The children were on their guard; some little prigs said their favorite food was spinach but capitulated over a choice between ice cream on one hand and spinach on the other. Otherwise, the children delighted in naming their pet aversions to food, what mother had to coax them to eat, and what she fussed about anyhow. (What a relief it would be if feeding could be regarded only as a refueling process or merely one of stoking the engine!) Some mothers complained of the effects of the noon crime programs on their children's appetites.

There were eighty-two of the 153 addicts (54 per cent) who showed eating disturbances, as against thirteen of the forty-seven nonaddicts (28 per cent), a difference of 26 per cent in favor of nonaddiction. Of these eighty-two showing eating disturbances, fifty (62 per cent) were severe addicts.

An example of the effects of terror in eating is this statement by a nine-year-old boy: "Sometimes I dream after a jungle picture that two men jump out behind me from the jungle and they keep pulling till they pull me right apart and put me in the fire and I feel sick as a dog when I wake up in the morning and can't eat at all."

Fears.—Parents frequently express indignation that their children have not volunteered the content of their fears and bad dreams to them (and so cut off the source of their fascinating addiction). The younger ones make no bones about telling them to an understanding person with no authority over them. The older ones often had to be approached indirectly, as in the past tense using such questions as "What did you used to think of while going to sleep?" "What did you fear if you were alone?" "What dreams have you had of death?" and then be led on to the present.

There were 144 of the 153 addicts (94 per cent) who suffered from fears, as against eight of the forty-seven nonaddicts (17 per cent), a

difference of 77 per cent. Of the sixty (42 per cent) with extreme fears, forty-three (71 per cent) were severe addicts, while none of the nonaddicts showed extreme fears. Of the sixty-four (44 per cent) addicts with ++ fears, thirty-nine (61 per cent) were severe addicts, as contrasted with two nonaddicts (4 per cent) with ++ fears, a difference of 57 per cent. It was interesting to discover how those fared who had not been protected from bad movies but had been from bad radio, and also the four allowed bad radio but no bad movies. Of the twenty-three with bad movies but good radio, five had extreme fears (22 per cent), a lessening of 20 per cent; eleven had ++ fears (48 per cent), a not significant difference. This regime had helped, but not enough. Two of the four radio addicts who were protected from bad movies, but who were also rejected at home, showed extreme fears and two ++ fears. The exciting radio program heard just before bedtime is continued in sleep, of course, and is thus very effective in contributing to bad dreams and fears.

Many children take a morbid interest in comparing notes on "awful" details striking terror into their hearts, especially when they are helpless to prevent inner identification of themselves, and sometimes their families, with the victims of the plot, which again adds more fears and keeps them fresh in memory.

- 1. Six-year-old: "I dream about a million of clutching hands and about taking eyes out and rats bite a boy and poison him. Sometimes there's two skeletons hanging from a tree and a man drags them up and puts them in a room and cuts the boy's head off and puts his hair on the tree and it looks like my head."
- 2. Seven-year-old: "When I wake up in the night, I see skeletons walking around leaving black marks and I hear footsteps and windows being opened softly."
- 3. Eight-year-old: "Gee, I've had plenty of dreams about the man they dipped in hot wax and the big spider that ate up men. He tore his flesh right off his ribs and everything. After shows I mostly see a gangster hiding behind the chair and I can hear him whisper and walk around and open the window and I duck my head under the covers and go clear to the bottom and lie crossways."
- 4. Nine-year-old: "Lots of times I dream of people sneaking in and sticking knives in me. Then I dream that Father had poison like in the movies and he died. My last dream was how Frankenstein took my mother and threw her in hot mud and the steam comes up and it burns people awful. When I wake up in the night, I see lots of faces like in the show and men mostly getting Mother kidnapped in an auto."
- 5. Ten-year-old: "There was a storm I dream about and the octopus that reaches out all his arms and gets you."
- 6. Eleven-year-old: "The worst I saw and dreamed about was an operation where they cut an artery too short."

- 7. Twelve-year-old: "After I've been to a bad movie, I try to be brave but I can't do it very well. In the dark I feel a knife behind me like in the show. I keep dreaming that the giants in the show take my mother and father and my dog and change the folks into fat toothpicks and put them through the grinder with the dog."
- 8. Thirteen-year-old, a fine looking, friendly boy: "When I saw Charlie Chan, I couldn't stand it so I got out and, when I got out, I was too seared to go home."

Nail Biling.—Using nail biting as a symptom of strain and stress occurring under various conditions, data were compiled which showed that nails were bitten by seventy-eight of the total 153 addicts (51 per cent), while eleven of the forty-seven nonaddicts did likewise (23 per cent), a difference of 28 per cent.

Terming as worst addicts those attending movies two to five times a week and listening to practically all crime radio programs, a comparison was made between the worst addicts (sixty-one), the rest of the addicts (fifty-three), and the nonaddicts (forty-seven), as to nail biting. It was found that among the thirty-one worst addicts who were nail biters, there were eighteen (60 per cent) who bit their nails only during movies, radio programs, or both, while eighteen of the rest of the addicts (38 per cent) did likewise. With the nonaddicts, three of the eleven nail biters (27 per cent) reported nail biting even when listening to good movies and radio. This gives a total of thirty-nine of the eighty-nine nail biters (43 per cent) who bit their nails during movies, radio programs, or both.

School was also noted as a place for nail biting, probably indicative of thinking difficulties in these children of normal intelligence, a reflection either of the condition of their nervous systems making it difficult for them to concentrate, or of the inadaptability of the school program to individual children, or possibly both. Twenty of the nail biters bit their nails only at school and nine both at school and during movies, radio programs, or both, making a total of twenty-nine of the eighty-nine nail biters (33 per cent) who had become nervous enough to bite their nails over the school situation, even though they were intelligent, thus registering insecurity in the school field. The rest of the nail biters, twenty-one (24 per cent), bit their nails at any time.

- 1. Seven-year-old: "No, I don't bite my nails" [hiding them from view; very little of them left]. They get like that when I listen to the radio but I wouldn't bite them ever."
- 2. Eight-year-old: "'Gangbusters' is my favorite program and I bite my nails way down thinking about it when I'm in bed."
- 3. Nine-year-old: "I bite my nails when I listen to 'Gangbusters,' 'Calling All Cars,' 'Court of Human Relations,' and others, and when I am going to sleep, I am the guy that goes on catching crooks."

- 4. Ten-year-old: "I bite my nails so much at shows that mother makes me chew gum instead. I bite them during the radio, too, if father is not watching me."
- 5. Eleven-year-old: "All the family listens to 'Drums,' 'True Detective Stories,' 'Calling All Cars,' 'Gangbusters,' and the rest. I think about them when I am going to sleep and I bite my nails when I hear them moving around and see a bandit climbing in the window."
- 6. Twelve-year-old: "When I am at the show I bite my nails. I jump out of my seat every time they shoot. My father likes the bad radio programs."
- 7. Thirteen-year-old: "I have to listen to the crime programs with Father and I bite my nails and I can't go to bed till after 10."
- 8. Fifteen-year-old: "I don't know when I bite my nails at the movies and listening to the radio but they get bitten clear down."

Other Reactions.—In studying the records of the sixty-one worst addicts (movies two to five times a week and practically all of the worst radio programs), nine girls were found whose reactions did not conform to those shown by the others, or to a much less degree, or by fewer phases. Of these nine, six were found to be in training for motion picture appearance, and were largely able to regard otherwise alarming actions from the viewpoint of a fellow actress, which, however, did not save them from all deleterious effects. These girls had a sophisticated attitude and were very self-centered in outlook and interests; the ordinary child world was brushed aside as unworthy of notice.

The other three girls were adolescents, engrossed with love to the exclusion of other emotions as they moved like somnambulists through the dense love haze that enveloped them. Even the persecution of a mean stepfather, in one case, failed to penetrate the haze with the customary sting. Several others did not reflect the usual strain either. These were older boys, big six-footers, who could remember, with an effort, all the common, fearful reactions in the past, but who had experienced such a tremendous upsurge of growth, vitality, and strength with their adolescent development that no day was long enough for the sports and other activities and interests in which they were now able to participate with success, to their deep joy. However, some of these were so carried along with the tide of restlessness and excitement that they demanded the most gruesome of murders, the utmost refinement of torture and cruelty, and so forth, to satisfy their intense craving for thrills. These will be discussed later.

By contrast, the amount of disturbance shown by the nonaddicts seemed ridiculously small, but it was remembered that the history taking of the fears, dreams, and disturbances in nonaddicts was a dull performance at best, with very little interesting material unearthed, so much so that the first few nonaddicts were thought to be holding back, but this did not prove true in the rest of their questionnaires and the dullness recurred with monotonous regularity throughout the series.

Radio Crime Before Bedtime.—Of course, in the majority of cases, radio crime cannot be considered independently of movie crime. The two are inextricably mixed. Both deal with the same crime situations. While radio could be said to lack visual stimulation, it does not work out that way, since the vivid movie scenes of similar situations flash into mind instantly as soon as mentioned on the radio.

The average child radio addict starts lapping up his fascinating crime at about 4 o'clock in the afternoon and continues for much of the time until sent to bed. The spoiled children listen until around 10 o'clock; the less indulged until around 9 o'clock. Of course, asking the child, or even at times the mother, when he goes to bed will not elicit this The easiest way is to ask the names of the programs listened to and then consult newspaper programs as to time. children are guileful enough to announce in an innocent tone of voice that they are in bed at 7:30, which is true enough, but what they neglect to add is that nobody in the home can escape any word from the radio when Father or Big Brothers break the monotony of their drab existence by the loudest blood-and-thunder they can manage. As was said before, Mother plays a part in the addiction also. There is nothing so miraculous as exciting radio programs in keeping the children quiet and "out from under foot" when in the home, so Mother continues to feel guilty about allowing them to hear "such dreadful things," but "everybody does it" and her hand is stayed. The children who come home for lunch have an added crime treat on the radio while eating, digestion to the contrary notwithstanding. Words fail when it comes to expressing an opinion on the increasing practice of giving a radio to a child for his own use and thus giving him a choice of programs, sleeping hours, and use (or rather, abuse) of play and social times; the children's reports will have to speak for themselves on this.

Everyone has noticed that if he takes his troubles to bed with him, or allows himself to brood over his worries or anxieties before dozing off, these same troubles, worries, and anxieties have a way of breaking through restful sleep into a state of semiconsciousness where they continue to hound and harass the defenseless mind by assuming most bizarre forms as fantastic dreams warranted to abolish all the refreshing effects of sound sleep. From the children's reports, the brain functions exactly in the same way when the mind is filled with movie horrors and radio crime before sleep. As a result, we are confronted with a situation of crime and horror uppermost in the child's mind from about 4 p.m. daily as a usual routine until bedtime, and after that continuing to interrupt restful sleep during the night. This uppermost position is again assumed when notes on terrifying aspects are compared with other addicts at school recess and noon, while fascinating plots are acted out after

school, to say nothing of what happens when the schoolroom work becomes dull and drab and all that is needed for relief is to punch a mental button to revive the vivid, thrilling film or plot. Each repetition of the crime in memory serves to deepen the original impression toward permanency.

Of the addicts, 85 per cent admitted listening to radio before going to bed and continuing to think of it on going to sleep. Not only that, but the next step turned out to be that of thinking of the self as the crook committing the crime, and finally progressing to the plane of planning the crime, acting it out, studying the faults of the plan, and rectifying them in the next plan made—in short, a long-continued study in being a criminal. One of these boys, 11 years old, had already acquired three real guns-a pistol, a repeater, and a six-shooter. That movies can have a similar effect was brought to mind when the writer inadvertently had to sit through a cowboy scene with much shooting in it. Not only was the audience largely composed of children from 3 years old and up, but a goodly number were armed with toy guns and every time a man was shot, whether cop, crook, or cowboy, each child's gun was aimed at the man on the screen, with a tense expression, each shooter said, "Bang," and then looked satisfied and proud if the man fell. If this is not training to kill, what is it?

- 1. Seven-year-old: "In the night I think of the cops and robbers on the radio and then the cops blame me and chase me."
- 2. Eight-year-old: "All of the family listen to 'Sing Sing,' 'Calling All Cars,' 'True Detective Stories,' and like that, but a doctor said I shouldn't listen to them any more so I don't stay in the room but I can hear from my bed."
- 3. Nine-year-old, a pretty little girl: "Oh, but I do love radio mysteries! Oh, Gee, I love 'em, even if I dream of them. I undress slowly so as not to miss any of them [all the worst]."
- 4. Ten-year-old: "I like to listen to the radio program when I eat my lunch. It's exciting. There's shooting in it."
- 5. Eleven-year-old: "I have my own radio in my room and I listen to 'Drums,' 'Sing Sing,' 'Calling All Cars,' 'Gangbusters,' and others. I think it all over when I try to go to sleep and it takes me quite a long time because I hear doors opening and guys under my bed and men with guns and I tuck my head under the covers and go clear to the foot of the bed. I can't read but I like the pictures in the 'big-little' books about detectives and shooting.''
- 6. Twelve-year-old: "I don't like to play with children any more since I have my own radio. I don't like to have my friends come in—my good times are with the radio. I start listening as soon as I get home from junior high and I listen until dinner time."

- 7. Thirteen-year-old: "When I'm going to sleep after the radio, I plan out crimes and then plan the best way to catch the criminals and then make a better plan."
- 8. Fourteen-year-old: "I like to think how I would have done in the crook's place when I am going to sleep."
- 9. Fifteen-year-old: "Mother's the one who likes crime in our family and we all hear it."

Callousness.—As was mentioned before, the highly seasoned, indigestible movie and radio fare has developed an ever increasing appetite for an overstimulating mental diet until an orgy is demanded for More than that, it was found that hundreds and hundreds of exposures to the sufferings of others for the purpose of entertainment most unfortunately have brought about, in many, many children, an atrophy of such desirable emotions as sympathy and compression toward those in distress, and also of the desire to help or alleviate the pain or misery of those being hurt or maltreated, even to the point of torture. The troubles of others were found to become stage scenes of no more personal concern beyond entertainment than the props used in the film settings. This atrophy leaves scar tissue in the form of a hardness, an intense selfishness, even mercilessness, proportionate to the amount of exposure and its play on the native temperament of each child. sentment to insults, indignities, and even cruelties to helpless old people, women, and children disappears. "It used to make me want to fight them when they did it but it doesn't any more." Altruistic impulses not followed by appropriate actions soon become sterile and nonexistent. It is easy to reason out that this is a natural sequence, but to hear small children voice this callousness still strikes a jarring note, while the blasé attitude of the older ones continues to cause a reaction like that of sand rubbed under glass. The writer has been unable to build up an immunity to either, but rather an increased susceptibility to the significance as the hopelessness of the situation continues.

- 1. Eight-year-old: "I used to dream about killings but I'm used to 'em now."
- 2. Nine-year-old: "I used to holler and holler after shows and couldn't sleep, but now nothing at all can have any effect on me." (Shows three times a week.)
- 3. Ten-year-old: "I don't mind killings now even when they are sawed up."
- 4. Eleven-year-old: "I don't mind dying now if they do it right away."
- 5. Twelve-year-old, a girl: "I used to get scared but I love them now and thrive on them. I really enjoy bloody ones and don't mind stabbings and killings at all."

- 6. Thirteen-year-old: "I only like shows where they are really exciting now. It doesn't make any difference to me if slaves get whipped to death or people stabbed. I don't care about any suffering if it isn't me."
- 7. Fourteen-year-old: "The way detectives handle cases is the most interesting part. I don't feel pity unless it's very bad. But in a way I would rather not watch them die."
- 8. Fifteen-year-old: "I don't care if people get hurt and I don't feel pity for them any more when they suffer. It's not so exciting if there isn't something like that. I get tired of the tame ones and want them with new excitement."

Dreams of Killings.—The terrific impact of violent death on the child's susceptible mind was indicated by the 74 per cent of the addicts who talked about it. These deaths are termed "killings" by the children, and again identification of the self in the horrifying murder scenes is seen to occur.

Closely allied to the fears of killings in addicts are those of death in the family if there is any sickness present at all, which is hardly surprising when the spectacle of death is so forcibly and frequently brought to mind. To some it was too much for them to admit, although their reactions strongly indicated emotional disturbance; others could nod but not talk; thirty-seven per cent could admit it. Children are unable to judge the seriousness of an illness in the family or even what sickness is, and tend to magnify to the danger point any sickness, even colds and headaches. This is true especially of children who are insecure in the home (about one in five or six). So great is the need of these children for love and security that a haunting fear lurks in the back of their minds that Mother may be lost to them entirely, that she may have been taken to the hospital and won't be home after school and may "never come back at all." Film scenes which depict dying keep this fear alive.

- 1. Seven-year-old: "Oh, boy, but shows are good, even if there's killing! I dream about a lady who has a elephant kill people for her. When I see men with guns in the dark, I grab the knife I keep under my pillow and get ready for them. I dream that lots of guys are getting shot and blood comes out of their heads and sometimes people getting whipped till they are dead."
- 2. Eight-year-old: "I dream of me getting killed and little girls getting killed and of robbers and shooting and stabbing and I never can call or run, I'm so frightened."
- 3. Nine-year-old: "All the time I dream about me getting knifed or shot or killed and robbers getting me and kidnappers pulling a sack over my head and me dying trapped in a cage with a tiger."
- 4. Ten-year-old: "Most of my dreams are about killings and sometimes it's Mother's head that is being chopped off. Then I can't get to

sleep again and I say, 'I'm getting a pill, I'm getting a pill,' twenty thousand times before I can get to sleep.''

- 5. Eleven-year-old: "I dream a lot and I don't like it—they are always trying to kill you with guns and animals and things."
- 6. Twelve-year-old: "I am always dreaming bad dreams about me getting electrocuted or stabbed."
- 7. Thirteen-year-old: "My last dream was about a soldier that they killed and then he kept right on fighting like in the show."
- 8. Fourteen-year-old: "I've dreamed many times of a man who had his head chopped off and it seemed to be me sometimes."

Kidnapping Fears.—These were a strange mixture of hearsay, warnings, and terrifying conceptions from movies and radio, as told by 78 per cent. It was early discovered that many of the children had individually worked out an especially horrifying plan of which they lived in dread. The reality of these fears was often demonstrated by the deep sigh and hopeless slump that followed the recital of even the most fantastic, sometimes winding up with a naive remark such as "And I don't like to be burned up," sometimes plaintively, sometimes resentfully, and sometimes querulously given.

In the nonaddicts, kidnapping fears were lacking in twenty-four (45 per cent); the rest said they had been given some warning by their parents, but it had evidently been sanely given because they said they seldom thought of it and only heard talk when there was a recent case of kidnapping. With no frightful mental pictures from movies or radio impressed on the suggestible minds of these children, their parents were able to reassure them as to their safety, while no words could reassure them or overcome the harrowing scenes of movie and radio.

- 1. Six-year-old: "I know a gangster will tie me to a chair and leave me until he robs the bank and there's a man walks up our street with bags and everybody knows what's in them. He says, 'Come into the car and I will give you some candy.'"
- 2. Seven-year-old: "I have to watch out for kidnappers when I go alone at night to the show. There was a boy killed after a show. They lay out ropes on the sidewalk and you step in and you get jerked and caught. I dream about it."
- 3. Eight-year-old: "When I think I hear kidnappers coming, I open the pocket knife I keep under my pillow and hold it ready. I think they will put the pillow around my head and take me off in the car to the desert or forest before they kill me."
- 4. Nine-year-old: "At night kidnappers hide and they sneak in and hold your mouth and put you in a car and go away and into a shack and leave you there and tie you up and put the house to fire."
- 5. Ten-year-old, a girl: "I often dream of me getting kidnapped with a live wire that one man holds with electric gloves and the other man waits to catch me."

- 6. Eleven-year-old: "When I'll be kidnapped, I would be on the street and they would get me into the car and take me off and kill me by burying me alive and I don't like to be buried alive."
- 7. Twelve-year-old: "There's a house next door and I fear that the kidnapper will climb up to the bathroom window and get in and take a hypnotic needle and put dope in my arm and if there is no ransom, he will kill me and throw me into the river with cement."
- 8. Thirteen-year-old: "Kidnappers will come in the window and take me off and shoot me down a buzz saw into a mill."
- 9. Fourteen-year-old: "I watch out that somebody that's insane doesn't come in and get me."

Daydreaming in School.—Finding children's thoughts off in crime clouds much of the time led to questioning as to what passed through their minds when doing nothing or when tired of their work in school. Sixty per cent of the addicts answered that they daydreamed in school of the most exciting of the movies and radio programs: the lovelorn, of sensuous love-making scenes; the would-be cowboys, of thrilling roundups and shooting; while most of the addicts gloried in lurid details of breath-taking crime sugar-coated as crime prevention efforts. The equipment furnished teachers with which to make impressions or hold the attention of pupils is skimpy at best, while movie magnates have almost unlimited funds for equipment to make the most vivid and lasting impressions and to use every art and device known to man to hold close, almost breathless, attention. How can spelling, number work, and punctuation ever hope to outrival love-making, shootings, and catching crooks? Children cannot be expected to "pay attention" or concentrate on dull school subjects when their nervous systems are overwrought. their minds unrefreshed by sound sleep, their digestion disturbed, and Rather, the conscious mind finds it is unable to stay on the track and the lurking subconscious instantly flashes a dazzling movie picture or an electrifying radio program which takes no effort whatever Is it any wonder that school standards have been lowered repeatedly and that the child's nervous system has the added strain that follows doing poor schoolwork?

Daydreaming in school by the nonaddicts was missing entirely in one-third because they kept themselves occupied, while the rest daydreamed of what they would do after school or on trips. Two preadolescent girls dreamed of handsome heroes in good movies, and two others of being singers or dancers. All their daydreams were quite uninteresting.

Another handicap to school success will be glimpsed if one considers what an inventory of the mental contents, say of average 9-year-olds, might disclose after the four, five, or six years' feasting on the weekly movies and daily radio, which consist of mysteries, adventure, war, spookies, jungle, wild west, love, gangsters, newsreels, science, comedy,

and so forth. The gourmandizing of masses of this indigestible, chaotic mixture, with no mental digestive juices powerful enough to break it up for assimilation, must lead to severe mental indigestion, if not colic or worse. Unfortunately it cannot be pumped out.

In the daydreaming of the addicts in school, again it is seen that crime execution goes over into the self committing the crime, a practice which is repeated innumerable times over the years of attendance, forming a behavior pattern that becomes deeply cut.

- 1. Seven-year-old: "In school I daydream of spooks and I dream of spooks, robbers and killers at night and I wake up and have to get out of bed and go to Mother."
- 2. Eight-year-old: "In school I can picture what I hear on the radio. In my sleep, I yell and yell."
- 3. Nine-year-old: "I daydream in school of 'Calling All Cars' and 'Gangbusters' and of being a king and killing all the crooks dead."
- 4. Ten-year-old: "In my daydreams I am the guy what does the killing by stabbing and killing enemies. The worst show I saw was where they killed lots of men and hanged them on hooks."
- 5. Eleven-year-old, a sissy: "I daydream I'm Nelson Eddy in the show or else I'm Jeanette McDonald."
- 6. Twelve-year-old: "When I'm tired of school things, I daydream of movies and the teacher hollers at me. Sometimes I'm the kid getting kidnapped."
- 7. Thirteen-year-old: "I can't get to bed until after ten because I have to listen to the crime with Father and in school I daydream of movie fights."
- 8. Fourteen-year-old, a boy: "I like love movies best and mysteries and killings next. I get most excited when they make love. In school I daydream of love movies and I pretend I'm the star."

Addiction of Unhappy Children.—It was noted with surprise that several children from well-to-do families, who were attractive but were strongly disliked by one of the parents, were almost vehement in expressing their craving for bad movies. "I love 'em; I can't see them enough times; none of them are bad enough for me," said one likeable little girl with a mother who was jealous of her. Further observation of unhappy children confirmed the impression that those most resentful of their unhappy condition were drowning their troubles in the greatest excitement they could find, and that only then could they forget their unhappiness. On the other hand, those that were utterly crushed by their rejection could not tolerate unpleasant movies for they could not stand another iota of unhappiness in any form.

A total of fifty-four unhappy children were found in the 200, of whom thirty-eight (70 per cent) revelled in the worst horrors and crime, and sixteen (30 per cent) of the more submissive were too near the breaking point to endure them.

Children who were downright happy were looked for and forty were found, all with unusual security in the home and in school and with their fellows. Of the forty, only one was a severe addict, a boy who had contracted the habit when he was very unhappy before a new, dearly loved stepmother had been acquired two years before. Seventeen had never seen a bad movie, eleven disliked them, and the rest tolerated them if they had to, the bad effects seeming somewhat neutralized by their The list of the type of movie best liked by the unhappy secure status. children ran like this for the aggressive: killings, gangsters, knife killings, murders and mysteries, spookies and shooting, where they chop them up, jungle, fighting, shooting. The submissive chose these types: love, Shirley Temple, funnies, Mickey Mouse, and children. the kind best liked by happy children ran like this: funnies, oldfashioned, horses, comedy, skating, musical, mysteries that are not scary, historical, science, dancing and singing.

- 1. Seven-year-old: "What I like best is killings, spookies, mysteries, Tarzan, and throwing knives."
 - 2. Eight-year-old: "Murders and gangsters are swell."
- 3. Nine-year-old: "I like first shooting, killings and gangsters. I saw how Lamson killed his wife but there really was not much killing in it [in a disappointed tone of voice]."
- 4. Ten-year-old, a timid, refined-looking girl, badly rejected: "Murders are best. Shooting and gangsters next. I liked the Vampire sucking out blood very much."

The submissive ones all said, in effect, "I just can't stand anything bad."

Love.—Love pictures and dramas were liked by fifty-three (27 per cent) and greatly disliked by most of the rest. They were admittedly liked best of all kinds by eighteen children from the ages of 10 to 16 years—six homely, fat, preadolescent girls, four potential actresses, four sissy boys in junior high school, and four adolescent girls.

It had seemed to the writer for a long time that since the advent of movies, sex awareness and sophistication concerning love matters were being awakened more and more early in the lives of children who attend. Of the fifty-three in this study who liked love pictures, twenty-four were boys and twenty-nine were girls. Five (three boys) were 8 years old; twelve (four boys) were 9 years old; eight (three boys) were 10 years old; six (four boys) were 11 years old; eight (one boy) were 12 years old; seven (four boys) were 13 years old; two girls were 14 years old; five (four boys) were 15 years old, and one boy was 16 years old. Through sympathetic participation in the experiences of the actors, these children vicariously must become familiar with the sensations aroused and undoubtedly experience bodily-repercussions from the same. With much repetition, this could tend to hasten sex awareness, if not development. How weak and mild the old love novels seem by com-

parison with the ubiquitous, sensual love scenes, with their added visual and auditory appeal! A number of children, mostly boys, complained that when their mothers took them to the show, the mothers would pick out love ones because they liked them best, and while at first the children would strongly object, they would finally "get kinda used to 'em" and end by entering into the emotions portrayed. Some children learn to like the love ones in order to avoid the fearful ones while still continuing their attendance.

- 1. Seven-year-old, a boy: "I shut my eyes at the gangsters but love ones are nice."
- 2. Eight-year-old: "I like war when not too dirty and love ones if the actors are good. Mother loves to listen to the worst radio crime. I can hear from my bed but I try to think of love ones to keep the scary ones out of my mind when I'm going to sleep."
- 3. Nine-year-old, a girl: "I like love movies best—they are so interesting. Gangsters are shivery."
- 4. Ten-year-old: "I like to stay home from school and listen to the love dramas that come on in the morning."
- 5. Eleven-year-old: "I daydream I am at a football game and I sit near enough to my best favorite movie star so that I can watch him all the time. I cry if my best movie star dies."
- 6. Twelve-year-old, a sissy: "I like to think over love dramas on going to sleep and I like to dress in my sister's clothes and put on rouge and lipstick."
- 7. Thirteen-year-old: "I like love movies best and mysteries and killings next. I get most excited when they make love."
- 8. Fourteen-year-old: "I daydream of love movies and I act out the part of the star."

SUMMARY OF THE REACTIONS OF THE NONADDICTS

Of the seven who had never seen a movie, and the three who saw none until 10 to 13 years of age and then only good ones, none had sleeping or eating disturbances or bad dreams. Only one, a girl who had had a serious fright, showed nervousness. As to fears, the same girl feared a repetition of her fright. One feared kidnapping from tales heard, and one his rejecting father. None daydreamed in school of movies or radio; four did daydream of what they would do after school. On going to sleep, two sometimes thought of the mild radio programs heard; otherwise, they thought of singing, dancing, and other things they like to do.

Of the twenty-nine with a record of no bad movies or radio, outside of the cases of four spoiled children who, as usual, had sleeping, eating, and nervous disturbances, as well as fears and dreams arising from social maladjustment entailing much friction with other children, there were no fears, dreams, or sleeping or eating troubles. One-fourth were nervous over school; one child over home troubles; one boy and one girl over severe rejection by parents; and one made nervous by an annoying, destructive, subnormal brother. Daydreaming in school was limited to the same troubles, together with two daydreaming of good movies, one spoiled boy who daydreamed of "fighting kids," and the rest daydreaming of sports, play, and what to do after school. On going to sleep, one-third thought of the mild radio program just heard; the rest of the day's doing and tomorrow's successes.

Of the two with no movies until 11 and 13 and then bad movies, and the one with good movies until 12 and then bad ones, the two boys who had lived very sheltered lives could not stand the bad ones seen, having bad dreams and fears, biting their nails at the movies, and becoming nervous afterward. The bright, well-poised 13-year-old girl soon developed an immunity after exposure and looked with a critical eye on the actors and acting.

Of the five with no movies until 10 to 13 years of age and then both bad movies and radio programs, four had built up a sufficiently stable nervous system to throw off the effects after a time, and when seen had no nervous, sleeping, or eating troubles, bad dreams or fears, although all had reacted to them at first. The fifth, a very unhappy youth waging a perpetual warfare against a perfectionistic mother, was very nervous and fearful, had eating and sleeping disturbances, and spent all spare time, when not listening to his own radio, in plotting crimes and revenge against the world.

PARENTAL ATTITUDES

As a whole, most of the foregoing reactions were not known to the parents, or if they were known, the significance was not recognized. All children were reported by parents to be in good physical condition no matter how malnourished. Nervousness was seldom reported as it was taken as a matter of course—"no more nervous than any one else" (including the parents)—and until it became annoying to the parent or school, it might be talked about (usually in the child's presence), but no cause or remedy was sought. In general, most mothers did not know how their children slept after they were small unless they themselves were disturbed, and even then night terrors and so forth were often regarded merely as a phase in development. Being thin, even scrawny. was taken as hereditary—"He has been thin for years" (and a movie and radio addict also). Not until it progressed to the stage where the school nurse fussed enough over his underweight was it given a thought. Pallor was seldom noticed, nor were habits of elimination known after the early years as a rule. Eating habits were noticed on account of the emotional charge present, which in turn prevented effective action. Other effects of movie horrors and radio crime were not even glimpsed, or, if they were, only dimly and passively.

Standards of parents could be fairly well determined by the degree of movie horrors and radio crime allowed. The same good judgment and high standards shown by restriction of attendance to once a month or less, with no horrors or radio crime, were reflected throughout the home life, regardless of social or financial status or even intelligence alone. Answers to the questionnaires showed that this type of parents did not follow the path of least resistance in anything but that they were willing to sacrifice their own convenience and unequivocably exerted great influence over their children, as evidenced by the high respect shown by the children for their parents' opinions and decisions and the desire displayed for real companionship with them, even when the discipline was strict and included physical punishment into high school age. Unless exceptional conditions supervened, these children enjoyed unusual security in their home life.

In discussion with parents of addicts, whenever opportunity allowed, the pediatrician, after eliminating organic causes, would point to concrete evidence that the health was being undermined, and in a surprising number of cases the cooperation of the parents was gained. Interference with school success was another talking point. Otherwise, the child's nagging, whining, and staging of scenes over restriction won out. the other kids' mothers let them go. I don't see why I can't go.'' But once persuaded to make a trial of eliminating bad movies and radio programs, the parents' pride in the added pounds laid on, as well as relief from the annoying disturbances, kept them to a high level of performance. It was emphasized to the parents that there were far from enough good movies produced to allow weekly attendance. Supporting measures were sought in substitutive recreation (games, trips, and so forth) and in an enlargement of the child's social life (parents' also), as well as removal of any other emotional foci of infection discovered in the exam-In these overstimulated children, one focus of infection that had to be completely excised was found to be a pocket of highly illustrated crime detective stories (infective and communicable also) sold by the chain stores for a dime each, with every other page a strikingly clear delineation of violent crime, warranted to hold even nonreading child patients from 5 years old and up, in a spellbound state. Addicts collect these "big-little" books by the dozens and by trading with each other manage to maintain a constant supply to fill any chinks in the day unoccupied by other excitement.

DISCUSSION

In view of the fact that the pediatrician is called upon more and more to do preventive work and maintain a good physical condition in his patients, this presentation is offered as a clue to further success in some of the puzzling cases that defy efforts to overcome a condition below par, no matter what physical hygiene is recommended, what carefully planned diets are prescribed, what ideal routine is laid out, or what tonics, vitamin medication, or other measures are ordered.

Terrifying scenes can have an inhibitory effect on the functioning of every organ in the body. Eating disturbances interfere with weight gains. No child with overwrought nerves can digest his food properly; indeed, in every system, elimination, circulation, or what not, interference can take place. Bad dreams and poor sleep can cause lack of appetite, irritability, malaise, thinking difficulties, and, by reacting on the nervous system, a whole train of undesirable symptoms. In short, the patient becomes inadequate to meet life's demands without strain and shows it in his under-par condition.

A true addiction apparently develops in the devotees of "bad" movies and radio, hastened and reinforced by vicarious participation in the scenes witnessed or heard, no matter of what nature, the fascination holding even with revulsion from frightful situations. In the case of unhappy children, most of them utilize the addiction as an escape from reality, much as a chronic alcoholic does drink. The effects of habituation in the form of callousness to the suffering of others began to show as early as the seventh year and mounted year by year, leading to demands for an ever increasing dosage of ultraexciting horrors. an habitué is no easier to cure than any other habitué when attempting to treat the patient alone. Crime and horror were found to be uppermost in the minds of addicts much of the time day and night to the exclusion of desirable mental content, and the physical condition must pay toll for this.

Factors contributing to this condition were found to be the tendency of the mind to continue turning over throughout the night what had just been seen or heard before going to sleep—radio crime in 85 per cent of the addicts-followed by the deepening of impressions the next day by retelling and re-enacting during play time; the inability of the mind to throw off the revolting "killings" seen in movies, the shock which was experienced being repeated many times in dream life as testified by 74 per cent; the superimposition on parental kidnapping warnings to 78 per cent of addicts, of the harrowing details of film and radio scenes of sensational kidnappings; poring over the numerous illustrations of violent crime in the common "big-little" detective books; escaping dull school work by daydreaming in school of being the actor in thrilling scenes, often as the crook; and the potent tendency in the child to vicarious participation in plots seen or heard so that, in recall or dreams, he substitutes himself and family for the victim or victims, thus intensifying unwholesome emotional reactions, often to a state of fearful struggle against a terrifying threat to the safety or existence of himself and members of his family.

Most homes were found sadly lacking in resources for social and recreational outlets for either parents or children, outside of movie and radio indulgence, social prestige being gained by the degree of indulgence.

Should strong and well-enforced backing be given the movement to have suitable films shown on Saturday and Sunday afternoons when the majority of children attend, and this backing be continued after film distributors backslide as they are doing at present, benefits would accrue not only to the children but to the physicians who are called upon to keep their child patients in a good state of health. Protests in numbers to sponsors have been found effective in eliminating deleterious radio programs.

CONCLUSIONS

In a study of 200 children, addiction to movie horrors and radio crime was found to be detrimental to the general health.

Nervousness was increased both in amount (76 per cent as against 40 per cent of nonaddicts) and in degree (52 per cent extreme versus 4 per cent in controls).

Sleeping disturbances were fourfold greater in number (85 per cent versus 19 per cent), and in degree were extreme in 28 per cent versus 2 per cent.

Fears were increased fivefold (94 per cent versus 17 per cent), extreme fears being found in 42 per cent of addicts as against none in the nonaddicts.

Elimination of movie horrors and radio crime was found in homes of high standards of child training throughout, regardless of social or of economic standing, or even of intellectual standing in some cases.

Treatment, whenever possible, consisted of gaining parental cooperation by evidence that health was being undermined and school success interfered with, followed by restriction of frequency of indulgence and elimination of crime and horrors, along with substitution of other recreations and social life, which gave the satisfactory results of an improved physical condition and subsidence of symptoms.