AN ANALYSIS OF PERSONALITY CHARACTERISTICS OF PARENTS REARING EMOTIONALLY DISTURBED ENURETIC CHILDREN

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TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

Table Page

Chapter 1

INTRODUCTION

In studying the causes and treatments of enuresis, or bedwetting, along with the physiological, developmental or learning, and organic aspects, many researchers have involved themselves in studying the personality characteristics of bedwetters. There are marked differences of opinion among researchers in the field of enuresis as to what, if any, relationship exists between personality characteristics and bedwetting. It is undeniable that at least some enuretics do have personality characteristics, which possibly are instilled by the parents; however, few researchers have studied this aspect of the problem.

Many parents rear emotionally disturbed children, but not all of these children are enuretic. This leads one to suspect that it could be a characteristic of the parents' personality that produces an enuretic child.

THE PROBLEM

Many children without physical impairment develop enuretic difficulties. This indicates that the enuresis, in such cases, is not a result of organic or physiological problems, but a psychological one. Several investigators

have approached the problem from a psychological point of view, some of whom are: Collison,[1] Murphy,[2] Lickorish,[3] and Blackman and Goldstein.[4]

The purpose of this paper was to study the personality traits of the parents for any characteristics that possibly cause the emotional symptom of enuresis in their children.

Statement of the Problem

Does a certain personality characteristic, or combination of characteristics, of parents of emotionally disturbed enuretic children produce the symptom of enuresis in their children?

Statement of the Hypothesis

There is no significant difference in the personality characteristics of parents with emotionally disturbed enuretic children as compared to parents with emotionally disturbed children who do not display enuretic difficulties.

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[1]David R. Collison, "Hypnotherapy in the Management of Nocturnal Enuresis," The Medical Journal of Australia, April 19, 1969, pp. 997-1010.

[2]Solbit Murphy and others, "Adolescent Enuresis--A Multiple Contingency Hypothesis," Journal of American Medical Association, Volume 218, November 22, 1971, pp. 1189-1191.

[3]J. R. Lickorish, "One Hundred Enuretics," Journal of Psychosomatic Research, April 7, 1964, pp. 263-267.

[4]S. Blackman and K. M. Goldstein, "A Comparison of MMPI's of Enuretic with Non-enuretic Adults," Journal of Clinical Psychology, March 23, 1965, pp. 282-283.

Purpose of the Study

It was the purpose of this investigation to study the personality characteristics of parents who have emotionally disturbed enuretic children. Enuresis is a problem in this particular population as well as varying other populations of children. It is a problem that has been approached from several different schools of thought, but the problem still exists. If it could be determined whether or not parental psychological traits influence their children's enuretic problem, and an idea of what these personality characteristics are, then the parents could be dealt with more effectively.

Significance of the Study

The literature on enuresis tends to agree that approximately 8 to 10 per cent of otherwise normal children between the ages of five through twelve have the symptom of enuresis and approximately one-fourth of the children referred for psychiatric counseling were enuretic. It appears that the problem of enuresis is quite significant and the solution to this problem could contribute to psychological theory and practice. If it is a certain personality trait, or pattern of traits, of the parents that produces an enuretic child, then the parents could be informed as to the source of the problem and the means for treatment. For concerned parents, prevention methods could be explained.

DEFINITIONS OF TERMS

When involved in research one is confronted with terminology that is not heard in everyday usage. Throughout this paper such words are used which makes it somewhat difficult for the reader to understand. This section proposes to define all unusual terms used in the paper so as to eliminate misinterpretation.

Diurnal Enuresis

Involuntary emission of urine during the daylight hours.[5]

Electroencephalograph (EEG)

Device for amplifying and recording brain waves.[6]

Encorpresis

Involuntary emission of feces.[7]

Enuresis

Bed wetting or clothes wetting in persons over the age of three who fail to inhibit the reflex to pass urine when the impulse is felt during waking hours and those who

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[5]Horace B. English and Ava C. English, Dictionary of Psychological and Psychoanalytical Terms (New York: David McKay Company, Inc., 1970), p. 160.

[6]Ibid., p. 174. [7]Ibid., p. 180.

do not rouse from sleep of their own accord when the process is occurring during the sleeping state.[8]

Hydrophobia

An excessive and inappropriate fear of water.[9]

Hypnosis

An altered state of consciousness induced by suggestion.[10]

Hypochrondriasis

Excessive concern and preoccupation with one's physical health and bodily ills.[11]

Hysteria

Organic symptoms in the absence of any observable organic disturbance.[12]

Manic

Excessive elation, excitement, and overactivity.[13]

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[8]Irwin G. Sarason, Abnormal Psychology and the Problem of Maladaptive Behavior (New York: Appleton, Century, Crofts, 1972), p. 649.

[9]English, op. cit., p. 244.

[10]Sarason, op. cit., p. 653.

[11]Philip A. Marks and William Seeman, The Actuarial Description of Abnormal Personality (Baltimore: The Williams and Wilkins Company, 1969), pp. 48-50.

[12]Ibid., pp. 51-52. [13]Ibid., p. 58.

Minnesota Multiphasic Personality Inventory (MMPI)

A self-report personality questionnaire designed to facilitate psychiatric diagnosis.[14]

Nocturnal Enuresis

Involuntary emissions of urine during the night, otherwise known as bedwetting.[15]

Paranoid

Notable or extreme sensitivity in interpersonal relationships; suspicious, jealous, and stubborn behavior; and a tendency to utilize the defense mechanism of projection.[16]

Personality

The particular constellation of attributes that defines one's individuality.[17]

Primary or Essential Enuresis

That enuresis in which the subject knows or has known no period of bladder control.[18]

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[14]Sarason, op. cit., p. 658.

[15]English, op. cit., p. 346.

[16]Marks, op. cit., p. 55.

[17]Sarason, op. cit., p. 663.

[18]English, op. cit., pp. 406-407.

Psychasthenia

Excessive doubt, difficulty in making decisions, a variety of fears, obsessive-compulsive tendencies, anxiety, insecurity, low self-confidence, and possible feelings of guilt.[19]

Psychopathic

Behavior that is maladaptive in terms of failure to adhere to social requirements and standards, and may be illustrated by one who impulsively and frequently violates social mores and customs.[20]

Schizophrenia

The common features of thinking disturbances, emotional blunting or inappropriateness, and a retreat or withdrawal from reality.[21]

Secondary Enuresis

That enuresis in which the subject has known a period of bladder control.[22]

Social Introversion

Tendency to withdraw from social contact and social activity.[23]

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[19]Marks, op. cit., pp. 56-57. [20]Ibid., pp. 52-54.
[21]Ibid., pp. 56-57. [22]English, op. cit., p. 482.
[23]Marks, op. cit., p. 59.

LIMITATIONS OF THE STUDY

The personality characteristics studied were limited to those measured by the MMPI. The MMPI is not considered by some in the field of psychology to give an adequate estimation of personality. The sample was a restricted one in that all the subjects came from the midwest state of Iowa. The results of the study should be interpreted accordingly. The sample was a select one in that it dealt only with parents who are aware of their children's problems and have sought treatment (as opposed to parents who refuse to recognize that their children have emotional problems).

Chapter 2

REVIEW OF RELATED LITERATURE

Researchers have studied enuresis since Freud's time but the cause, in many instances, is still unknown. It has been approached from a physiological, developmental (learning), organic, and psychological point of view. The physiological approach assumes enuresis is the result of an inadequate bladder or some other physical incapability. Researchers who feel the cause is developmental explain enuresis through a learning approach. They feel the child failed to get proper and consistent training in the habit of dryness. From an organic approach researchers feel that children are enuretic because of brain impairment which cannot be treated. Researchers who take a psychological point of view feel the problem is an emotional one and enuresis is only a symptom of a much deeper conflict. Each of these approaches has merit and explains the difficulty in some instances, but not all. In some cases the problem is either a physical one or some brain impairment while in other cases there is no physical or organic difficulty and appears to be of emotional origin. This is the approach this investigation is taking; that is, enuresis, in many cases, is psychological and is instilled in the child by a parental psychological trait or pattern of traits.

In reviewing the literature no studies were found that approached the problem of enuresis by studying parental personalities for a causative factor. Therefore, to acquaint the reader with the type of studies that have been conducted with enuretics a review of related literature was done on enuresis in general.

PHYSIOLOGICAL APPROACH TO ENURESIS

According to this approach, enuresis is the result of a small or inadequate bladder or some physical impairment. The general procedure for treatment is surgery and/or medication. Following are reviews of various studies that approach the problem of enuresis from a physiological viewpoint.

Colby and others compared the effectiveness of the two drugs Triclofos (sedative) and Ephedrine (stimulant). The study was confined to fifty-five children ages five to fifteen years, each having at least three normal wet nights a week. Any patients with renal abnormalities were excluded. The drugs were taken upon going to bed in doses compatible with their ages. The patients themselves (or their parents) made daily records of whether or not there had been a wet night before. These records were summated each week of the trial and the mean number of nights calculated per week. The data showed the difference between the two active drugs was not statistically significant. It was concluded that both drugs showed a therapeutic effect in

this trial, but there was no significant difference between their effectiveness and no relation to the type of sleep each produced. There were no side effects in fifty-three of the children (96 percent).[24]

Bray first suggested that enuresis might be allergic in origin forty years ago. Others observed that removal of certain foods from the diet sometimes leads to a relief of enuresis even when the patient may have had no generally accepted allergic disease. Since allergic disorders are often familiar, this study indicates that enuresis, like allergic disorders, is familiar. The groups studied were: (1) 105 enuretic children (73 boys and 32 girls) and 105 control group children; (2) 84 parents of enuretics and 84 parents of non-enuretics; (3) siblings of the first group (115 boys and 139 girls) and 124 boys and 109 girls in the control group.

The diseases studied were enuresis (persisting after age four), urinary infections, eczema, hay fever, asthma, recurrent bronchitis, urticaria, headaches, and food and drug allergies. In the study of 105 enuretics it was found in boys there is a significant association of enuresis with hay fever, uriticaris, food and drug allergies, and an antipathy to milk. In girls there was an increased association to eczema but not significant (at the 5 percent level).

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[24]A. B. Colby and others, "Sedative and Stimulant Compared to Enuresis," General Practitioner, April, 1970, pp. 30-31.

An analysis indicates there is a significant increase in enuresis and urinary infections among the fathers of enuretic children. And among the mothers of enuretics there is also a significant increase in the incidence of enuresis at the 5 percent level. The only significant increase in incidence of siblings of enuretics is of an antipathy of milk.[25]

Butcher and Donnai found two cases in which enuresis was physiological in nature and not psychological. The two cases studied were two small girls who developed enuresis secondarily to vagina filling during urination. It is likely that these disorders cease after the patients become more fully developed, since the ages of the two girls were six and four years of age. It is a matter of debate whether this problem should be corrected with surgery.[26]

Mofenson, Greensher, and Horowity comment on the use of Imipramine Pamoate (a highly controversial drug used in the control of enuresis in children). The more popular and available the drug becomes the more incidence of overdoses occur. Severe symptoms may occur after a dose of 10mg/Kg, inevitable symptoms with a 20mg/Kg dose, and the potential fatal dose after 40mg/Kg is ingested. A fatal

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[25]Anne Zaleski and others, "Enuresis: Familial Incidence and Relationship to Allergic Disorders," Canadian Medical Association Journal, Vol. 106, January 8, 1972, pp. 30-31.

[26]Christina Butcher and Diana Donnai, "Vaginal Reflux and Enuresis," British Journal of Radiology, Vol. 45, July, 1972, pp. 501-502.

outcome was reported in an eighteen month old child who ingested 14 tablets (350mg). These doctors suggest that when the drug is prescribed that it be packaged in a safe device, and should be prescribed for the enuretic who has a serious problem coping with the disease.[27]

Martin agrees with the previous doctors in using the drug Imipramine Pamoate for children. He noted that the increase in the popularity and availability also increases the chances of overdose in any drug. There have been reports of severe hypotension due to the use of Imipramine in therapy. To solve the problem the physician must: (1) thoroughly educate the parents as to the use and the importance of keeping such toxic drugs out of the reach of children; (2) individualize the patients chosen to undergo Imipramine therapy with a careful follow-up program; (3) employ the use of "strip packaging" (a new pharmaceutical technique which makes it harder to ingest large doses).[28]

McKenzie reports that after age six secondary enuresis is more common than primary enuresis. While psychological stress, insecurity, and immaturity are among the usual causes, organic factors do occur. These include

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[27]Howard D. Mofenson and others, "Imipramine Treatment of Enuresis," The American Journal of the Disturbed Child, Vol. 123, February, 1973, p. 181.

[28]D. Martin, "Imipramine Treatment of Enuresis," The American Journal of the Disturbed Child, February, 1973, Vol. 123, p. 181.

Diabetes Mellitus and Polyuria, urinary tract disorders and others. The case report cited in this article had some interesting developments. It was found that a thirteen year old girl was being treated for nocturnal enuresis for five years. She had no previous problems with this before, until two years following recovery of severe meningitis. There is general agreement that the lesion developed after this disease should have been removed by prompt surgery. The likelihood of enuresis would have been greatly lessened.[29]

An article by Smith cites a case in which an eight year old girl had some very adverse side effects from the use of a drug for the control of enuresis. Nortriptyline Hydrochloride caused this girl to have partial hearing loss. After the medication was stopped some improvements in hearing resulted, but full restoration did not occur. It was concluded that children of twelve years or under should not receive this drug.[30]

Lempp studied sixty EEG's of 88 subjects with nocturnal enuresis that showed an abnormal EEG. In 30 of these the abnormalities indicated epileptic convulsions. Another group of 76 bedwetters, not subjected to EEG, were compared

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[29]Thomas McKenzie, "Nocturnal Enuresis as a Late Complication of Meningitis," British Medical Journal, December 11, 1971, pp. 663-664.

[30]Kenneth E. Smith and others, "Ototoxic Reaction with Use of Nortriptyline Hydrochloride: Case Report," The Journal of Pediatrics, Vol. 8, No. 6, June 1972, pp. 1046-1048.

with the first group with regard to their history and clinical findings. A functional relation between nocturnal enuresis and epilepsy was found, evidenced by the facts that both are connected with phases of sleep and that nocturnal enuresis can be influenced--if only temporarily--by anti-epileptic drugs. This does not contradict the opinion that enuresis is a psychosomatic disease which becomes manifest in a paroxysmal sympathetic disturbance or in a paroxysmal disturbance of the sleep-waking control.[31]

Arnold states that in a study Bakwin conducted with enuretics, he failed to consider the genetic factors that may have been mediated through an inherited sleeping pattern (deep sleep) and an inherited anatomical feature (stenotic meatus). He also said that there are examples of siblings with stenotic meatus: the deep sleepers tend to be enuretic, the light sleepers nocturic. Physicians assume, generally without documentation, that urinary symptoms must be due to cerebral, neurogenci, psychiatric, or developmental causes. The only one that may be justified is developmental causes and "psychiatric theories on bedwetting, as Gersh puts it '. . . don't hold water'."[32]

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[31]R. Lempp, "Nocturnal Enuresis and Epilepsy," Zeitschrift fur Kinderheilkunde, September 2, 1965, pp. 324-329.

[32]Samuel J. Arnold, "Enuresis," American Journal of the Disturbed Child, Vol. 123, March 10, 1970, pp. 84-86.

patients fell in the seven to fifteen year age group (49 girls and 111 boys). The trial period ran from six to eight weeks. There was a one year follow-up period. Excluding those children with organic and psychological disorders leaves a total of 137 children with essential enuresis. Of this group only 22 were not helped by the Mozes machine, giving a cure rate of 83 percent. This apparatus seems to have the highest cure rate of any other method of treatment, with a 50 percent cure being the highest before. It is the physicians responsibility to speed-up or activate bladder control during sleep in the enuretic. The physician reduces the frustration of the parents and the child while preventing a probable psychological problem in the future. When successful, the child's self-confidence increases. "To this end the Mozes Detector has proved useful in our clinic."[34]

According to an experiment by Forsythe and Redmond, emotional stress was found to be the major cause of enuresis. The experiment involved 200 children with enuresis, 66 percent having been cured after treatment with an electric alarm over a thirty week period. A two year follow-up period was conducted afterwards. Young in 1965 had a cure rate of 36 percent with drugs, and this method took twice as long and relapse was twice as common as compared to the conditioning methods. Forester, Stein, and Susser in 1964

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[34]J. B. J. McKendry and others, "Enuresis Treated by an Improved Waking Apparatus," Canadian Medical Association Journal, Vol. 106, January 8, 1972, pp. 27-29.

carried out an experiment with the use of an electrical alarm and amphetamine and found that the amphetamine did not accelerate the cure and was less effective. In this experiment there were 132 boys and 68 girls. All were subject to routine examinations periodically. An organic cause could not be excluded without extensive pathological tests. The original apparatus used was designed by Pfaundler (1904). The cure rate for both sexes was 66 percent.[35]

Bental and Weiss present a family of five sibling--all enuretics. The family background and history, clinical, electroencephalographic, and psychological examinations are described. It is concluded that not always one single factor, organic or psychogenic, may be considered as the sole causative agent of enuresis nocturna.[36]

From selected publications by MacKeith and others on enuresis, it is argued (but not tested) that anxiety during the sensitive learning period for acquiring nocturnal bladder control, generally the third year of life, is a frequent factor in the origin of the disorder. "The hypothesis had

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[35]W. I. Forsythe and A. Redmond, "Enuresis and the Electric Alarm: Study of 200 Cases," British Medical Journal, Vol. 1, January 24, 1970, pp. 211-213.

[36]E. Bental and A. A. Weiss, "Psychological and Organic Aspects of Enuresis Nocturna," Israel Annals of Psychiatry and Related Disciplines, January 2, 1964, p. 93.

implications for toilet training and for management of nocturnal enuresis."[37]

ORGANIC APPROACH TO ENURESIS

According to this approach the enuretic suffers from brain damage and is unable to learn good toilet training habits. The more severe the brain impairment the less likely learning will occur. Treatment usually consists of medication. Few studies have been conducted using this approach.

Mahony considered a child enuretic when he urinated in bed after three and one-half years of age. He says that it is alarming to find out that 8 to 10 percent of the otherwise normal children between the ages of five and twelve have enuresis. He made a study of more than 200 enuretic children that indicated that enuresis is organic in nature. He thinks that the disorder should be treated in children five years and older to cut down or avoid progressive organic and psychiatric damage to the affected child.[38]

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[37]Ronald MacKeith, "A Frequent Factor in the Origins of Primary Nocturnal Enuresis: Anxiety in the Third Year of Life," Developmental Medicine and Child Neurology, April 4, 1968, pp. 465-470.

[38]David Mahony, "Studies of Enuresis. I: Incidence of Obstructive Lesions and Pathophysiology of Enuresis," The Journal of Urology, Vol. 106, pp. 951-958.

PSYCHOLOGICAL APPROACH TO ENURESIS

This approach assumes enuresis to be a symptom of a much deeper problem or conflict and feels by simply removing the symptom the underlying cause has not been dealt with which will result in symptom substitution. Treatment generally consists of conventional counseling techniques and/or medication. Following are reviews of studies done approaching enuresis from a psychological point of view.

Eleven patients with enuresis were treated by hypnosis and a follow-up study began. Their ages at the time of the experiment ranged from five and one-half years to thirty-eight years of age. While the patients were in a hypnotic state a number of procedures were carried out. The patient would be given the suggestion that he would have a dry night and continue to relax and be able to cope with tensions and other problems of life. Ego-strength procedures were given to help in social adjustment and overcoming feelings of inferiority. All the patients except one had suffered from nocturnal enuresis for many years, the longest being twenty-six years and the shortest being thirteen years. Hypnotherapy was used only as a last resort. All patients were strongly motivated and had a high level of hypnotizability. One patient had no positive improvement after four sessions and elected to terminate therapy. The remaining ten patients all achieved an end result of becoming "dry" at night and they remained "dry" through the follow-up period (one to five

years). Four of the patients had a form of hydrophobia and enuresis was associated with this specific fear. Three of the four were less fearful of water after the treatment.[39]

Murphy published a report on whether or not enuresis is a physiologic disorder. The purpose of the study was an attempt to sort out the various factors involved in the causes of enuresis. The age of the twenty-seven subjects ranged from twelve to eighteen years. Excluded from the study were patients with I.Q.'s less than eighty or borderline psychotic patients, and those with established neurological conditions possibly associated with enuresis. The two control groups were: (1) the clinical control group (twenty-two clinic patients with no enuretic symptoms); and (2) the community control group (twenty-four high school students). The ratio of male to female enuretic patients over the two year period was 3.5 to 1. Sixteen enuretic patients were one year or more into puberty and eleven were pubertal.

Neurological evaluation of the twenty enuretic subjects showed that fifteen had some form of pathologic abnormality, none of which were severe, and half of which had minimal abnormalities. There were no neurological tests run on the control groups. The neurological tests pointed out that four subjects had borderline neurological impairment

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[39]Collison, loc. cit.

(poor coordination, confused laterality, reflex asyety, mild speech defect, or visual handicap).

There was no significant difference between the enuretic patients and the clinic controls in the results of psychological tests used to indicate subtle organic involvement. Severe disorders in child rearing were defined as those in which child neglect was brought to the attention of the authorities. Moderate or severe preschool child rearing problems were present in the entire enuretic group and 90 percent of the clinic control families. Less than half of the community control group had moderate adjustment problems. Almost all behavior problems such as temper outbursts, lying, aggressiveness-destructiveness, were more prevalent in the enuretic group. Among the many character traits often mentioned as typical as that of enuretics (submissiveness, dependency, immaturity, aggressiveness, and passivity) only submissiveness and aggressiveness occurred continually among the twenty enuretics. There was no significant difference between the enuretics and the controls with respect to handling emotional problems.[40]

Blackman and Goldstein compared Army recruit enuretic subjects with thirty-four non-enuretic subjects on MMPI performance. The enuretic subjects presented significantly more pathology on seven of the nine clinical scales. No

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[40]Murphy and others, loc. cit.

improvement subjects showed positive correlation between frequency of enuresis and Hs and Hy scores.[41]

Lockorish compared one hundred children (ages two to eighteen) suffering from psychogenic enuresis and other psychiatric disorders with a similar number who were not enuretic. Of thirty characteristics examined, only four showed significant differences between the two groups. These were long duration prior to admission, few troubles with peers or at school, and no psychosis.[42]

An article by Armstrong points out what has been done recently to help the child with enuresis. It is noted that enuresis is a common condition, becoming less so as the individual matures. Kanner reported that 26 percent of the children referred for psychiatric consultation to the Children's Clinic at John Hopkins Hospital were enuretic. Some authors view the problem as purely a developmental disorder, others see it as a psychological problem, and still others think it is a result of poor training procedures. There are suggestions that enuresis is psychological in nature, but that does not mean in every case. "It would be hard to convince the authorities responsible for the mass evacuation of children from London in World War II, that the effects of separation from parents may not precipitate enuresis."

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[41]Blackman and Goldstein, loc. cit.

[42]Lockorish, loc. cit.

McKendry found that enuretic patients experience more psychologically adverse family environments. Although most enuretics lose their childhood enuresis, all of them do not, and in the meantime adverse psychological and organic effects may result.

> Until a more rational basis for treatment is achieved, the practitioner is justified in approaching treatment through a variety of methods, simultaneous or serially as indicated, before concluding that his enuretic patients cannot be cured.[43]

SUMMARY

In reviewing the literature it appears that enuresis can be treated by any one of the four approaches, physiological, developmental, organic, and psychological, or by a combination of two or three approaches intertwined. The physiological approach assumes the cause to be physical and if it cannot be corrected by surgery or medication the child is left on his own to grow out of it. The developmental school of thought has a high success rate in correcting enuresis by using a device to awaken the child when he wets the bed. Following along the lines of learning theory, this is adequate treatment. That is, ridding the child of the symptom and not dealing with the underlying cause, assuming the total personality will improve when the symptom is gone. If the child is organic or has some form of brain damage, it

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[43]C. T. Armstrong, "Enuresis," Canadian Medical Journal, Vol. 106, January 22, 1972, pp. 109-110.

is almost impossible to treat him. The more severe the brain damage the less likely any improvement will occur. Many children show no signs of organicity and are physically adequate, but still develop enuresis. This suggests a deeper problem with bed wetting being one symptom of an emotional disturbance. The psychological approach feels if only the symptom is treated and the underlying cause is not dealt with, another conflict area will develop, symptom substitution. Conventional counseling is the method used here in the medical model.

In treating enuresis it appears that first, one must rule out organicity and any physiological aspects and secondly, one must choose a type of treatment--either a learning approach or a psychological one. The decision depends mainly on one's orientation and background.

Chapter 3

METHODS AND PROCEDURES

The problem investigated in this study was do parental psychological traits influence their children's behavior and, if so, could a characteristic of the parent's personality be a causative factor in the development of enuresis in their children. In this chapter a description of the study itself is entered into. This includes the population analyzed, the instrument chosen to assess personality characteristics, the design followed during the investigation, the procedure used in collecting the data, and the statistical approach used in analyzing the data.

SAMPLE

The sample consisted of the parents of two groups of emotionally disturbed children. Emotional disturbance was established on the criteria of being diagnosed as such by a psychiatric interview and a psychological examination. Being enuretic was determined by the child having several wet nights each month and being placed on the drug Tofranil at bed time. The enuretic group was selected by going through the cumulative files on the Cromwell Children's Unit at the

Mental Health Institute, Independence, Iowa, to pick out thirty-five children between the ages of eight and fifteen (mean age of twelve) who displayed the symptom of enuresis. This group was matched with thirty-five children who were selected by the same process but who did not possess the symptom of enuresis. The control variables were age, sex, and ruling out organics and psychotics. Both samples came from the same educational and socio-economic level, upper-lower and lower middle class.

Several enuretics were eliminated due to inavailability of parental MMPI profiles. The enuretics as a group had more broken homes and foster home placements and more uncooperative parents than the control group. This limited the number of parental MMPI profiles which consequently limited the sample size. To obtain the purest statistical results only children were used who were living with both their natural parents. This further reduced the sample size to sixteen sets of parents per group.

MATERIALS AND INSTRUMENTATION

The MMPI was employed in this study. To assess personality characteristics one should use an instrument that is well known and actively used to enable familiarity with the test results. One must also choose an instrument that possesses both reliability and validity in order to maintain accuracy in information collection. The validity

of the MMPI as a tool for describing personality has been demonstrated by Meehl.[44] He compared the personality description compiled by clinical psychologists to that obtained from the MMPI actuarial description. The latter was 38 percent superior for out-patients and 19 percent superior for in-patients.

The MMPI consists of three validity scales and ten scales that measure personality variables. The MMPI is made up of 566 questions requiring a true or false response, as they apply to the subject. The test is scored manually or can be machine scored. Each scale was normed on a clinical population of people who displayed that particular personality trait. The raw scores are converted to T scores and a T score of 50 is average, or normal. Twenty or more T scores above or below the mean is considered a diagnostically significant deviation from normal. The ten scales are as follows: Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic deviate (Pd), Masculine-Feminine (Mf), Paranoid (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Hypomania (Ma), and Social introversion (Si). The three validity scales (L, F, and K) pick up an attempt to fake good or fake bad, random answering, inability to understand the questions, and lack of cooperation. Strict criteria were adhered to for eliminating invalid profiles.

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[44]Philip A. Marks and William Seeman, Actuarial Description of Abnormal Personality, 1969, pp. 29-59.

Subjects were eliminated if Scale F was greater than a T score of 70, if there were thirty or more unanswered questions, or if Scale F score minus Scale K score was greater than a +9.[45]

DESIGN OF THE STUDY

The study was aimed toward determining whether or not a significant relationship can be established between parents personality traits and the symptom of enuresis in their emotionally disturbed children. The emotionally disturbed children were obtained at the Cromwell Children's Unit at the Mental Health Institute, Independence, Iowa. The thirty-five enuretic children were matched with thirty-five non-enuretic children for age and sex. If either organicity or psychosis was present that child was eliminated. These control variables were necessary because the older a child becomes the more likely he is to grow out of the symptom, males are slightly more prone to enuresis than females, children with brain damage have more enuretic difficulties, and the psychotic children were eliminated to decrease the variables in the sample.

DATA COLLECTION

The MMPI was administered to each of the parents, during the period from 1966-1973, with the instructions that

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[45]W. Grant Dahlstrom, George Schlager Welsh, and Leona E. Dahlstrom, An MMPI Handbook, 1972, p. 172.

they were to try to answer each question and to give their own opinion of themselves. It was explained that if a statement was true or mostly true, as applied to them, they were to answer true. If a statement was false or not usually true, as applied to them, they were to answer it false. There was no time limit for completing the test.

The answers were placed on a separate answer sheet that was scored manually. There are thirteen scoring keys, one for each of the ten trait scales and three for the validity scales.

The T scores were used in computing the statistical analysis.

DATA ANALYSIS

Comparing the personality traits between the two sets of mothers and between the two sets of fathers involves two variables. An analysis of variance was performed on the data.

A two-way analysis of variance was appropriate for analyzing the data from this experiment. The two factors are: (1) enuretics versus non-enuretics, and (2) parents; mothers versus fathers. There were thirteen analyses of variance performed, one for each of the MMPI scales. In the event of a significant F score, t-tests were performed between groups to determine the source of variance.[46]

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[46]Janet T. Spence, Benton J. Underwood, Carl P. Duncan, and John W. Cotton, Elementary Statistics, 1968.

Chapter 4

ANALYSIS OF DATA

In this section the process in which the data was analyzed is discussed. Specifically, the response analysis and the statistical analysis is presented.

RESPONSE ANALYSIS

As described in Chapter 3, there were 35 children in each group. Of these 70 children, 31 had no fathers and 3 did not have mothers. This left 106 parents involved in the study. Three of the remaining 106 parents turned in invalid profiles. It was decided to use only children who were living with their natural parents; this further reduced the sample to 16 sets of parents in each group. There were, then, 64 parental MMPI profiles in the statistical analysis.

STATISTICAL ANALYSIS

An analysis of variance, described in Chapter 3, was used to test the null hypothesis that there was no significant difference between the personality characteristics of parents with emotionally disturbed enuretic children as compared to parents with emotionally disturbed children who

do not display enuretic difficulties. There were thirteen analyses of variance performed, one for each of the MMPI scales.

Table 1 presents the means of the two groups (enuretic and non-enuretic) for both fathers and mothers on the thirteen MMPI scales.

Table 1

Mean T-scores for the Enuretic--Non-Enuretic and Father-Mother Groups on the Thirteen MMPI Scales

Scale	Father		Mother	
	Enuretic	Non-Enuretic	Enuretic	Non-Enuretic
L	52.69	52.75	52.38	51.37
F	51.44	50.63	52.81	51.31
K	52.56	60.44	56.50	57.06
Hs	54.44	54.44	56.94	55.38
D	55.81	53.81	57.56	53.81
Hy	57.75	59.44	62.06	61.19
Pd	58.31	58.00	62.19	58.38
Mf	52.69	52.06	50.56	48.37
Pa	52.13	51.88	55.44	54.56
Pt	52.87	51.00	52.38	51.25
Sc	52.13	52.13	52.06	54.81
Ma	56.81	50.75	51.31	49.69
Si	51.25	50.88	52.06	50.19

Tables 2 through 14 present the analyses of variance of the MMPI data. For all the tables the .05 level of significance was employed.

Table 2 presents the analysis of variance of the L scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 2

Analysis of Variance of Scale L on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	1394.50	32	43.58		
A: (Father-Mother)	11.39	1	11.39	0.25	NS
Between	2490.86	31	80.35		
B: (Enuretic-Non-Enuretic)	3.52	1	3.52	0.04	NS
Error(b)	2487.34	30	82.91		
AB Interaction	4.52	1	4.52	0.10	NS
	1378.59	30	45.95		
Total	3885.40	63	61.67		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the L scale.

Table 3 presents the analysis of variance of the F scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 3

Analysis of Variance of Scale F on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	1066.50	32	33.33		
A: (Father-Mother)	17.02	1	17.02	0.49	NS
Between	1289.36	31	41.59		
B: (Enuretic-Non-Enuretic)	21.39	1	21.39	0.51	NS
Error(b)	1267.97	30	42.27		
AB Interaction	1.89	1	1.89	0.05	NS
	1047.59	30	34.92		
Total	2355.86	63	37.40		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the F scale.

Table 4 presents the analysis of variance of the K scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 4

Analysis of Variance of Scale K on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	1943.50	32	60.73		
A: (Father-Mother)	1.27	1	1.27	0.02	NS
Between	3103.23	31	100.10		
B: (Enuretic-Non-Enuretic)	284.77	1	284.77	3.03	NS
Error(b)	2818.47	30	93.95		
AB Interaction	213.89	1	213.89	3.71	NS
	1728.34	30	57.61		
Total	5046.73	63	80.11		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the K scale.

Table 5 presents the analysis of variance of the Hs scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 5

Analysis of Variance of Scale Hs on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	3329.50	32	104.05		
A: (Father-Mother)	47.27	1	47.27	0.43	NS
Between	3737.86	31	120.58		
B: (Enuretic-Non-Enuretic)	9.77	1	9.77	0.08	NS
Error(b)	3728.09	30	124.27		
AB Interaction	9.77	1	9.77	0.09	NS
	3272.47	30	109.08		
Total	7067.36	63	112.18		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Hs scale.

Table 6 presents the analysis of variance of the D scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 6

Analysis of Variance of Scale D on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	2627.00	32	82.09		
A: (Father-Mother)	12.25	1	12.25	0.14	NS
Between	2957.00	31	95.39		
B: (Enuretic-Non-Enuretic)	132.25	1	132.25	1.41	NS
Error(b)	2824.75	30	94.16		
AB	12.25	1	12.25	0.14	NS
Interaction	2602.50	30	86.75		
Total	5584.00	63	88.64		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the D scale.

Table 7 presents the analysis of variance of the Hy scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 7

Analysis of Variance of Scale Hy on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	1999.50	32	62.48		
A: (Father-Mother)	147.02	1	147.02	2.42	NS
Between	2252.73	31	72.67		
B: (Enuretic-Non-Enuretic)	2.64	1	2.64	0.04	NS
Error(b)	2250.09	30	75.00		
AB Interaction	26.27	1	26.27	0.43	NS
	1826.22	30	60.87		
Total	4252.23	63	67.50		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Hy scale.

Table 8 presents the analysis of variance of the Pd scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 8

Analysis of Variance of Scale Pd on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	2627.00	32	82.09		
A: (Father-Mother)	72.25	1	72.25	0.87	NS
Between	2693.94	31	86.90		
B: (Enuretic-Non-Enuretic)	68.06	1	68.06	0.78	NS
Error(b)	2625.88	30	87.53		
AB Interaction	49.00	1	49.00	0.59	NS
	2505.75	30	83.53		
Total	5320.94	63	84.46		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Pd scale.

Table 9 presents the analysis of variance of the Mf scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 9

Analysis of Variance of Scale Mf on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	3426.50	32	107.08		
A: (Father-Mother)	135.14	1	135.14	1.24	NS
Between	1382.11	31	44.58		
B: (Enuretic-Non-Enuretic)	31.64	1	31.64	0.70	NS
Error(b)	1350.47	30	45.02		
AB	9.77	1	9.77	0.09	NS
Interaction	3281.59	30	109.39		
Total	4808.61	63	76.33		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Mf scale.

Table 10 presents the analysis of variance of the Pa scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 10

Analysis of Variance of Scale Pa on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	1858.00	32	58.06		
A: (Father-Mother)	144.00	1	144.00	2.52	NS
Between	2706.00	31	87.29		
B: (Enuretic-Non-Enuretic)	5.06	1	5.06	0.06	NS
Error(b)	2700.94	30	90.03		
AB Interaction	1.56	1	1.56	0.03	NS
	1712.44	30	57.08		
Total	4564.00	63	72.44		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Pa scale.

Table 11 presents the analysis of variance of the Pt scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 11

Analysis of Variance of Scale Pt on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	1924.00	32	60.13		
A: (Father-Mother)	0.25	1	0.25	0.00	NS
Between	2487.00	31	80.23		
B: (Enuretic-Non-Enuretic)	36.00	1	36.00	0.44	NS
Error(b)	2451.00	30	81.70		
AB Interaction	2.25	1	2.25	0.04	NS
	1921.50	30	64.05		
Total	4411.00	63	70.02		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Pt scale.

Table 12 presents the analysis of variance of the Sc scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 12

Analysis of Variance of Scale Sc on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	2621.00	32	81.91		
A: (Father-Mother)	27.56	1	27.56	0.323	NS
Between	2657.94	31	85.74		
B: (Enuretic-Non-Enuretic)	30.25	1	30.25	0.35	NS
Error(b)	2627.69	30	87.59		
AB Interaction	30.25	1	30.25	0.35	NS
	2563.19	30	85.44		
Total	5278.94	63	83.79		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Sc scale.

Table 13 presents the analysis of variance of the Ma scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 13

Analysis of Variance of Scale Ma on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	3528.50	32	110.27		
A: (Father-Mother)	172.27	1	172.27	1.58	NS
Between	3589.23	31	115.78		
B: (Enuretic-Non-Enuretic)	236.39	1	236.39	2.12	NS
Error(b)	3352.84	30	111.76		
AB Interaction	78.77	1	78.77	0.72	NS
	3277.47	30	109.25		
Total	7117.73	63	112.98		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Ma scale.

Table 14 presents the analysis of variance of the Si scale responses. There were no significant main effects, and a non-significant interaction was obtained.

Table 14

Analysis of Variance of Scale Si on the MMPI for Personality Differences Between Parents of Enuretic and Non-Enuretic Children

Source of variation	Sum of squares	df	Mean squares	F	Significance
Within	2020.00	32	63.13		
A: (Father-Mother)	0.06	1	0.06	0.00	NS
Between	2193.44	31	70.76		
B: (Enuretic-Non-Enuretic)	20.25	1	20.25	0.28	NS
Error(b)	2173.19	30	72.44		
AB Interaction	9.00	1	9.00	0.13	NS
	2010.94	30	67.03		
Total	4213.44	63	66.88		

Since the obtained F-values did not fall within the critical region the null hypothesis is accepted for the Si scale.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Enuresis is a problem to the parents, to psychologists and to the child himself. Several theories have been developed to explain enuresis but few offer a solution to the problem. It is obvious that parents influence their childrens' behavior but how much and to what extent is unknown. In this study enuresis was approached from a psychological point of view, theorizing that the parents' personality traits influence their childrens' behavior and possibly could be a causal factor in the development of enuresis in their children. In this section the results of the study are summarized, conclusions are drawn from the data, and recommendations are made for future research in this area.

SUMMARY

This investigation was conducted to determine if a significant relationship exists between the personality characteristics of parents rearing emotionally disturbed enuretic children as compared to parents rearing emotionally disturbed non-enuretic children, (i.e., do the parents instill enuresis in their children?). From the thirteen analyses of variance performed on the data, one

for each of the MMPI scales, there was found to be no significant relationship to exist for any of the variables at the .05 level. The null hypothesis was accepted in all thirteen cases.

CONCLUSIONS

From the results of this study it is concluded that the personality characteristics of parents of enuretic and non-enuretic emotionally disturbed children are similar, as measured by the MMPI. It is further concluded that parental personality traits and the symptom of enuresis in their emotionally disturbed children are unrelated.

There are several possible reasons that the parents' MMPI profiles were not significantly different. One reason is that since approximately three-fourths of the children in the study were diagnosed adjustment reaction of childhood, it is speculated that testing the parents of "normal" enuretic children and comparing them to the sample would not have resulted in a significant relationship. Adjustment reaction of childhood is a label given to children who display emotional problems but who are not basically seriously mentally ill. These children are quite similar in most respects to "normal" children so their parents would not necessarily differ significantly from "normal" childrens' parents.

The parents in this investigation realized that their children had emotional problems and sought treatment

for these problems. If this group had been compared to a group of parents who have enuretic children but refuse to recognize it as a problem, there may have been a significant difference. Failure to recognize enuresis as a problem would indicate a denying, unhealthy quality in those parents, which is different from parents who seek treatment for their enuretic children.

This sample came entirely from the central Iowa area. It is possible that this particular geographical area, being a restricted sample, is not adequately representative of child-rearing practices. If a sample from the east or west coast or from another country could have been obtained a significant relationship between parental personalities may have been established. The influences from the different geographical areas and cultural upbringings could possibly be related to emotional difficulties.

A significant finding, incidental to this study, was that the enuretics came from more disturbed homes than the non-enuretics. The enuretics as a group seemed to have many more problems emotionally than the non-enuretic group. They also had more family difficulties, most of them being removed from their natural homes and placed in foster homes or group homes, several of these for a long duration of time. The enuretics living with their natural parents seemed to have more uncooperative parents than the non-enuretic group. Many enuretics were eliminated because they

were living in foster homes and parental testing was not possible or their parents refused to be tested. If all the parents could have been tested the results of this study may have been different.

These findings seem to be consistent with Armstrong's,[47] that is, the effects of separation at an early age appears to be related to enuresis. McKendry[48] found that enuretics experience a more psychologically adverse family environment, which was also true of the sample in this study.

It is possible that no significant relationships were found because parents do not influence the development of enuresis in their children. Parents influence their children's emotional development but not necessarily to the degree of a specific symptom such as enuresis. Even if one assumes enuresis is instilled in children by their parents, one must realize that mentally healthy parents could possibly instill enuresis in their children by child-rearing practices that they feel are correct when in actuality they are anxiety producing for the children. Therefore, one would expect "normal" MMPI profiles.

The results of this study indicate that it would be extremely difficult to test for a single factor, such as a personality trait, that could be linked to the development of enuresis in emotionally disturbed children.

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[47]Armstrong, loc. cit. [48]McKendry, loc. cit.

RECOMMENDATIONS

For future research in this area it is recommended that a greater variety of diagnostic categories be covered. For example, a sample from each of the following: psychosis, neurosis, character disorder, and "normal" children. Also, if the MMPI could be supplemented with other personality assessment devices, for example the Rorschach, a more accurate and realistic picture of personality structures could be obtained.

The way the parents perceive their child's enuretic difficulty could be an important factor to consider for future research. Do they seek treatment or refuse to recognize it as a problem? A group of parents who deny their childrens' enuretic problem could possibly differ considerably from parents who accept their children's difficulties and seek treatment.

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