

1934

Schizophrenic personality

Donald M. Alderson
University of Nebraska Medical Center

This manuscript is historical in nature and may not reflect current medical research and practice. Search [PubMed](#) for current research.

Follow this and additional works at: <https://digitalcommons.unmc.edu/mdtheses>



Part of the [Medical Education Commons](#)

Recommended Citation

Alderson, Donald M., "Schizophrenic personality" (1934). *MD Theses*. 613.
<https://digitalcommons.unmc.edu/mdtheses/613>

This Thesis is brought to you for free and open access by the Special Collections at DigitalCommons@UNMC. It has been accepted for inclusion in MD Theses by an authorized administrator of DigitalCommons@UNMC. For more information, please contact digitalcommons@unmc.edu.

SCHIZOPHRENIC PERSONALITY

by

Donald M. Alderson

SENIOR THESIS

April 1934

SCHIZOPHRENIC PERSONALITY

Schizophrenia is a functional mental disorder of affective origin which most frequently afflicts individuals just as they reach the age of usefulness to the world in which they live. As they reach the first flush of manhood and womanhood they find themselves cast into a world of fantasy from which they cannot emerge and are doomed to a living death, devoid of emotion and unable to participate in normal activities and affairs. Strecker and Ebaugh (1) estimate that 30,000 to 40,000 young men and women become victims of this dread affliction every year. It constitutes a far greater problem than tuberculosis and carcinoma combined both from the humanitarian and economic viewpoints.

Schizophrenia was called Dementia Praecox by the old Kraepalinear School because it appeared to be a mental deterioration beginning in early life or resulted in early mental deterioration when occurring later in life. Others have interpreted the term to mean a deterioration occurring in precocious individuals. This, however, is a false meaning and not that intended by Kraepalin. Present day Psychiatrists (2) prefer the term Schizophrenia because it indicates a molecular splitting of the emotional, intellectual and volitional spheres. It is primarily a chronic psychosis

progressing gradually to a mental, affective and motor deterioration.

There are cases which begin as an acute psychosis with excitement simulating the manic states in which all other features are nevertheless characteristic. Contrary to the earlier beliefs this disease may come to a standstill at any stage and many of the symptoms may subside partially or completely; but if it progresses it leads to a dementia of definite character (3).

Ebaugh's opinion is that it is not a clear cut disease entity and prefers to speak of the process rather as a reaction type (1). C. W. Burr prefers to refer to the reaction types as the Schizophrenias (plural), and naively speaks of each as an individual disease process (4).

The etiology of Schizophrenia is definitely unsettled. Theories have been propounded by practically everyone who has written of the disorder. The etiological factors are many. Some appear to be quite logical while others draw largely upon the imagination. Among the most probable of etiological factors are: a. Hereditary factors; b. Environmental factors; c. Sexual conflicts; and d. Personality habit patterns (1) and (5). These main factors of etiology are found to be interlaced with one another and finally to be subdivided into many consequent divisions. Volumes have been written on each factor but since this paper deals primarily with the personality factor and since all of the

factors of etiology have a very definite bearing on the personality of the individual they will be treated in that light.

Heredity is difficult to evaluate in relation to psychiatric problems. The presence of a psychopathic family history is indeed high among patients who present psychotic manifestations. The predisposition to psychosis of children of parents who are definitely psychotic is of sufficient importance to be one of the pertinent issues in medico-legal psychiatry for the past half century in the form of sterilization of psychotic persons.

A large percentage of hereditary taints can be explained according to Mendel's laws of dominant characteristics (1). Still we must take cognizance of the fact that children imitate neurotic traits in parents and build upon this basis faulty habit formations (6). Of somewhat greater importance are the instances in which a psychopathic family history is apparently entirely lacking or at least not demonstrable.

Harry Stack Sullivan (60) is of the opinion that the occurrence of Schizophrenia is to be explained on the basis of experience rather than upon that of heredity or primary organic disorder. Certain people when caught in the stream of certain events undergo a change in their total activity, behavior and thought to the degree which we call Schizophrenia. Two considerations arise: Are these people average people, or are they instead people predisposed by innate constitutional factors to this illness? Or, do there exist certain necessary organic predisposing factors and vicious

physiological influences prodromal to this illness?

The best modern opinion (5) (9) (10), is to the effect that the etiology of Schizophrenia is to be sought in events that involve the individual personally, events relating the individual to other individuals more or less significant to him. It is known that inter-relation with personally significant people constitutes the most difficult sort of reaction required of an individual (8). Not only does this task require a great amount of skill and learning, but also the full value of achievement in the eyes of ones associates does not clearly appear until the second decade of life when adjustment to social environment begins to be more rigidly demanded. This is the usual age at which Schizophrenic disorders become manifest. It is only after the appearance of a real need for interpersonal intimacy that one finds himself called upon to develop delicate adjustments of his own life to and with other personalities.

The newborn, if he is not an idiot, is marvelously equipped with the rudiments of apparatus for dealing with situations and integrating itself with very complex environmental situations. He learns in early life the most prevailing culture of the parents - especially the mother. He develops a set culture by observation and imitation of his particular group (6) (10) (11).

Personality has eluded satisfactory definition but may be considered as the aggregate of all individual at-

tributes, the function of which has to do with interpersonal relations, and is the complex of the sum of powerful biologic drives and results to a large extent from the product of the totality of culture, traditions, customs and conventions promulgated by society.

Strecker and Ebaugh (1) define it as: "A condensed record of the individuals life long reactions to his environment and the crystalization of this constant interplay and contact". It is definitely an individual reaction and is made up of the myriads of circumstances which go to make up the total experiences of the individuals life (12). No two individuals of identical hereditary and environmental background react quite the same to circumstances or have exactly identical personalities. Identical twins who are raised in close contact throughout life will be found frequently to have strikingly variable reaction patterns.

Oskar Diathelm states that: "Personality is the psychological integrated unit which has developed and is developing during life (13). Thus one can see an increasing integration of the personality from infancy to maturity. Every circumstance which occurs in an individuals lifetime and the individual's reaction to that particular circumstance can be likened to a brick or unit of building structure. Each has a very definite relationship to every other unit of structure as it is being experienced and formed. Each experience has a bearing on every other

sequential and chronological reaction and likewise conditions that reaction. As each of these units, experiences, reactions to experiences, habits, mental traits, and external influences become integrated into a unit we have what we choose to call the personality of individuality. H. K. Petry summarizes it as: "The Personality is essentially a psychological term. It concerns that which distinguishes or characterizes an individual in relation to his environment, based upon observation of habitual modes of expressive behavior"(14). Personality is in that sense those things which make an individual different from every other individual. Since personality is individual, presenting all degrees of variation and modification, it does not lend itself readily to classification.

Mark A. May of Yale University thus describes personality as a complex variable (15). In fact it is the most complex of human variables because it includes, in a certain way all of them. It is distinctly a social variable. Psychologists are pretty well agreed that personality covers a wide field but they are by no means agreed upon the areas that it does not cover.

Thus J. B. Watson states: "Let us mean by personality an individual's total assets (actual and potential) and liabilities (actual and potential) and the reaction" (16). H. C. Warren on the other hand states that personality is the general rating of the individual. It

embraces all the variables of ones character - temperament, intellectuality, skill and morality (17). T. H. Allport further says: "Personality is the individual's characteristic reaction to social stimuli and the qualities of his adaption to the social features of his environment" (18). R. S. Woodworth does not formulate a definition of personality in a few words, but fills a chapter describing it and says that it includes four major factors: physique, temperment, instincts or drives, and intelligence (19).

It will be noticed that none of these gives any clear or definite idea of what is included under the term personality or its distinguishing qualities. If it is to include all human variables as the above definitions indicate, then how is it to be described? A clue may be found in the adjectives popularly used to describe personality. Different personalities are described as attractive, forceful, strong, magnetic or their opposites. Practically all adjectives refer to the individual as he stimulates others affectively (15).

To the man on the street or in the office personality is a concrete and real thing. It is the stimulus which the individual projects upon other individuals. In other words, as a stimulus value, personality ranges all the way from zero to infinity. The individual who has a zero personality (if there be such a person) is one who makes no impression on anyone. From the stimulus

value, an individual personality will affect different persons positively or negatively. From the Psychologists standpoint personality is measured by the value of induced reactions.

Ira S. Wile states that the personality suggests the sum total of habitual characteristics that constitute one individual as compared to all others. It involves the sum total of his reactions and capacity for reactions to other human beings. It is the center and core of all activity containing all the essence of the Ego in relation to the Super-ego. It is founded on physical and mental patterns developed with social reference (20).

Wile has been quite conclusive in his definition indicating the complexity and breath of the individual's attributes called personality. He has mentioned "Habitual characteristics" which means the particular more or less stereotyped habit patterns by which one does things including the myriads of personal peculiarities individual to him alone. Such habitual characteristics are built up through imitation of others who have made an impression on the individual, through close association and through adjustment to various personal and impersonal situations (6). Habits, reactions and behavior are terms difficult to separate in true meaning. To take a more common usage, a habit is a conditioned reaction to a situation which has occurred in sufficient number of times (the reaction becomes a fixed action pattern)(19). The reaction will be

similar to similar situations or stimuli. What conditions the particular reaction depends upon practically all of the past experiences - conscious and unconscious - which have left an impression on the mind. These impressions occur in the form of pleasures and pains, likes and dislikes, fears and satisfactions. Behavior can conveniently be expressed in patterns of reactions and habits.

Pythagoras, of the Sixth Century B.C., was the philosophical patriarch of the introspectionistic school of Psychology. He developed the idea of mental faculties of which he included three: Natural, Spiritual and Animal. He referred to the Natural faculty as the dominant instinct of self preservation including those emotions associated with hunger, pain and fear. It was through exercise of this faculty that man sought food and shelter, protected himself from danger and withdrew from pain and displeasure. The Spiritual faculty was that instinct which controlled the emotions. It was the love and worship of the individual, the principle of ideals. The Animal faculty was the biological urge of man, the reproductive sense. These same faculties still persist though we have found them to be more complex and interlocking. We now realize that behavior consists of more than instincts. Modern psychologists call the Pythagorean faculties either primary instincts or complexes and name them respectively the 'self-preservative instincts or complex', the 'herd instinct or complex', and the 'race-preservative instinct or complex' (21).

There is within the personality a system of experiences to which we apply the terms "the ego - or self". This is built up of all the factors of experience that we have in which significant responses are initiated by other people. Our "Self" is made up of reflections of our own personality that we have encountered mirrored in those with whom we associate, or rejections of unacceptable qualities we detect in others.

The evolution of the personality is extremely important in the development of Schizophrenic traits. Normally it follows a quite regular course (22). The most primitive part of this personality is contributed by the mother and supplemented by the father. These parts are infantile and quite resistant to change (8). If the later stage of evolution is irregular the growth of the personality becomes distorted giving rise to the pathological personality. If the deviations are less grave they may take, in boys, the form of continuing of rather childish or juvenile appraisal of the self as it is reflected from the mother (23). To such boys the weaning of self from dependency on the parent is extremely difficult. The normal progress is the replacing of the mother ideal by girls as the love object; this does not occur in abnormal development (8).

In such cases the mother only of all women is eligible for interpersonal intimacies. The individual cannot progress smoothly to the biologically ordained heterosexual goal. Then the time comes for the need for close interpersonal

relations he is found badly crippled. He may not even be equal to integrating interpersonal relations with boys in the normal "gang life". It is seldom that it is as grave as this but the handicap at personality evolution is most frequent in the true heterosexual level. The morbid youths to whom Schizophrenia illnesses are likely to occur, often succeed measurably in the preadolescent socialization, become members of a gang, and may even proceed to great intimacy with some other youth, or may even be popular with other boys; even be leaders. Quite often, however, other success in preadolescent socialization is mediocre.

After the coming of frank genital sexuality that initiates true adolescence, certain schizoid people begin to have serious troubles. If their status is acceptable among their own kind they must proceed to become interested in girls. Their personality organization precludes the growth of such interests and they must do something to preserve their self respect. They just cannot become interested in girls but their interest is chiefly in those of their own kind, the homosexual attitude; or the mother is so fixed as a love object that no girl could possibly meet his ideal (the true oedipus complex); or the opposite occurs such as Schuppenhauer has described in referring to his life-long disgust with all females; or as Adler has suggested in his genesis of the inferiority complex (24); The sense of inferiority, feeling of fear of the opposite sex, fear of ridicule and the will to be a man.

These all prevent a heterosexual adjustment (25). Such personalities must resort to extensive subterfuge such as a fictitious sexual life; they must segregate themselves from general "gang" and continue a non-heterosexual society with individuals similarly handicapped. It is in this group that we find nearly all Schizophrenics (8) (9). If the progress of adolescence includes a severe rebuff in interpersonal relations, and there is a warp of the personality, the outcropping of Schizophrenic processes is apt to occur. If the personality is rather well developed in fields other than those making for sexual intimacies of the fully adjustive kind, then, while the break may be preceded by a long period of increased stress, it will be rather abrupt and acute in type. If there has been a grave distorting, such as for example, that the boy has retired from the realities of interpersonal relations to the juvenile world of authoritarian adults, then the Schizophrenic processes are apt to make their appearance insiduously.

Frequently there seems to be no basis for a maladjustment. There is no demonstrable conflict to account for a faulty habit formation. We have come to recognize, as Sigmund Freud has pointed out, that not all conflicts are conscious but on the contrary the most disturbing are those within the subconscious, disturbing because the individual himself has no knowledge of them and no explanation for them (26). Being subconscious they exert an unconscious

Influence upon habit formation and behavior. These subconscious conflicts may be spoken of as two types or of two origins (27). First: They exert the repressed conflicts, which are those desires and wishes which one has that are first suppressed because of chiefly moral but also economic reasons. As these desires arise and are suppressed into the unconscious where they must remain seeking their outlet through symbolic compensation (either constructive or destructive). Second: Unconscious conflicts arise in infancy through similar wishings and strivings which are apparently perfectly normal but transitory (26) (27).

It is recognized that the child has none or very little recollection beyond a certain age somewhere between three and four years of age. Conflicts which arise within this age period are very apt to remain unconscious throughout life (27). There are recognized three more or less definite infantile levels (2) (28). The first is the frequently spoken of as the intrauterine level which the individual leads a wholly plant-like or parasitic existence. All contact with the external world is absent. The individual neither feeds himself nor cares for his secretions. Some authors (29) extend this level to the extrauterine level in which the infant recognizes his relationship with others in his environment. Still others make a separate level of the extrauterine stage (26). The infant at this level is interested in the factors of his

existence solely. The dominant urge is self-reservation; the infant is extremely egocentric, the world as it is known revolves about him and for him; food is demanded and fears are definite; infants are notoriously stubborn and destructive. The next level is the one in which the infant recognizes his relationship to others in his environment, particularly the mother because she has supplied all his needs and comforts and thus becomes the primary love-object. Here we have the origin of a mother fixation or the oedipus complex. The third (fourth) stage is one in which the individual identifies himself with those of his own sex, a particularly egoistic level, often spoken of as the homosexual level.

A conflict at one of these levels may produce a fixation at that particular level so that there occurs a compensatory break resulting in an actual psychosis. The flight from reality is from the point of previous fixation thus allowing the unconscious conflict to be satisfied. Psychoanalytic investigation has done much to support these theories (26). Unconscious conflicts can be uncovered which undoubtedly had their origins at some such definite level. Then, too, the final outcome of Dementia Praecox cases have their explanation in fixation at infantile levels (25) (29).

It would appear that the Oedipus Complex is the point of origin of Schizophrenia since it is the beginning of the sexual life of the individual and the point at which maladjustment most readily takes place. Why sex should be more easily maladjusted than other bodily functions may have its

explanations in several sources. Sex serves a decidedly different function in the human than in the lower animals (30). It is primarily that which demarcates man from animal (31). Sex in the human serves a dual function, besides being reproductive it has a cultural function. It has been enshrouded in mystery from the cultural viewpoint (32). It has a definite bearing on practically all of the other bodily functions. It is this development of its dual function that makes maladjustment so liable. With the maladjustment at the first level of sexual adaptation we find a compensation either in the level above or below (26).

Hence in the Hebephrenic praecox there is a tendency to silly and childish acts, a disregard for outside influences, and a complete lack of emotional response. There is often neglect of his bodily needs, food and drink and the emptying of bowel and bladder, though there may be outbreaks when the desires are not satisfied. Frequently they are seen to assume a uterine habitus with the legs flexed on the body and the head bowed between the legs. They may resume this station for hours totally unresponsive. This type of disorder corresponds to the lower intrauterine level. It is marked by profound deterioration.

In the Catatonic Praecox the obvious disturbances are motor, but may differ considerably in individual patients (22). Two varieties with marked differences in symptoms are described. In the stuporous state the patient superficially appears to be unconscious of his environment. That

he is not unconscious is shown by the fact that subsequently he may be able to recount events, even those which are relatively unimportant. The apparant unconsciousness is in reality only a failure to react to stimuli. Not only are hunger, thirst, cold and heat disregarded, but also painful stimuli. For long periods of time the patient may be mute. These inactivities constitute what is called passive negativism. On the other hand, but physiologically closely associated with the passive condition, there may be other motor abnormalities. The patient may assume most peculiar bodily and facial attitudes (32). During his waking periods he may remain huddled up in a squatting position, his head between his arms and knees. The facial muscles may be contracted or the lips twixed into grimaces (32). The eyelids may remain wide open or tightly closed. He may stand rigidly in one position with the arms and legs awkwardly placed or exhibit *flexibilitas cerea*. This is a state in which the patient can be moulded into whatever position is desired. Sometimes the imposed position or commands start the patient to carry out a series of actions until the stimuli ceases. This is called automatism. An instance of this is related to eating. The patient may pay-no heed to a call for dinner but if lead to the table and started will continue to eat until the food is consumed. Echo-praxia, the senseless repetition of actions which the patient sees carried out by someone near him and Echolalia, apparantly

senseless repetition of sounds, words and phrases which he hears, are two common symptoms.

In Catatonic excitement the picture is reversed (33). Instead of passivity there is great activity. The behavior is characterized by wildly unreasonable actions. He may attach persons, break furniture, and may become homicidal or suicidal. Definite movements, activities, words or phrases may be repeated over and over again. The actions here are also childish manifestations of egocentricity, stubbornness, imitation and destructiveness seen in the higher infantile levels. The actions of the Catatonic which superficially appear to be purposeless have been said to be symbolic and definitely purposive when the underlying conflicts can be determined (22) (32).

The third form of dementia praecox is called paranoid (1) (33). It belongs to the homosexual level and is more or less closely related to a definite psychotic state called paranoia, which is the outcome of a definite personality type more or less closely associated with the Schizophrenic. It is marked by extreme egotism with usually a sense of superiority consisting of actual compensation for an inferiority. Suspiciousness is always marked in this personality type. This state is characterized principally by delusions, usually accompanied by hallucinations. The delusions may be systematized or transitory. There is a tendency to grandiosity but a definite split between the emotion and delusional state may exist. It is this split

that chiefly differentiates this type from paranoia. This type may deteriorate but less readily so than the other forms of dementia praecox. It is interesting to note that there occur all variations between these related types of Schizophrenia and pure types can be said to be relatively rare. It is important to understand the end results of so malignant a disease as Schizophrenia to grasp the relation between that end result and the prepsychotic states that lead to such a disorder (9) (25) (29) (34). Also to contemplate those factors in the personality development which may have a bearing upon a maladjustment leading to a Schizophrenic state.

To return now to a discussion of personality, we may say that it includes the consideration of quantitative and qualitative differences of specific physical patterns together with patterns of organization, with varying degrees of expressiveness. This embodies a concept of the mobilization of the various parts of personality in terms of conscious and unconscious urgings and strivings, wishes and motives, desires and goals, or simply the fundamental libido in the Freudian sense.

Such a concept tends to bring out the fact that organization and expression are essential in the variation of the personality. It is known that a person may have the highest ideals, wishes and morals, but if there is no expression or urge to push toward the goals involved the personality exhibits itself in a markedly different way from the one which

does achieve adequate expression.

Organization of personality depends upon its original or constitutional elements, including intellectual capacity and responsiveness to such environmental influences as education, training and guidance. Regardless of individual differences the dominant characteristics in a personality depend upon the degree of successful integration of all the elements entering into it, the balance of the constituent factors and the amount of energy which is active. Energy, industry, interest, application, endurance, intellectual capacity, emotion sensitivity and liability, and social adaptability involve phases of organization that shape personality while at the same time, these are expressive of the structure and integrity of the personality.

There is an aspect of personality which is inherent and physical. There has been much controversy as to whether this factor has any particular bearing upon the development of the personality or is a habitus which accompanies those hereditary elements which go to make up personality. Kretchmer's is the most notable work in reference to the relation of habitus and personality. He has made most notable observations and has distinguished four types of habitus, but it is his general opinion that the particular habitus accompanies the personality type rather than that it has any direct bearing upon development of personality (35).

According to Alfred Adler, his studies of individual psychology place a direct bearing on physical being and personality development. The essence of his theory and reasoning is that any physical defect gives rise to a feeling of organ inferiority in the individual, which inferiority the person strives to compensate by definite reactions in an effort to overcome the sense of inferiority. He even goes further to state that such an inferiority may be unconscious to the individual and the organ which is inferior may be one which is unperceptible, the results being much the same (24).

E. W. Wexberg in his studies of individual psychology states that every individual begins life with a feeling in inferiority due to contacts with elders which are considered superior beings (36). It is this precocious feeling of inferiority and the desire for superiority that leads to the organization of the libido. The feelings of success and failure play a large part in the integration and organization of personality (37).

We have so far attempted to define what is meant by personality from a psychological and psychiatric view point and to briefly describe the development of personality in the normal individual. Personality remains the only constant factor in which we can objectively deal in psychiatric disorder (38). It is recognized that definite changes of personality precede the psychic changes that lead to psychotic and psychoneurotic manifestations. Franklin

Ebaugh has stated that, the maladjustment of the child of today has a definite connection with the abnormal mental reaction or actual psychosis of the adult of tomorrow (38). Kasanin states that: "the relations between prepsychotic personality and psychotic manifestation has been observed by many writers. Especially in the consideration of the functional psychosis, the affective and Schizophrenic disorders, a dichotomy of personality types has been assumed which are formulated to aid in the early recognition of prepsychotic states (39).

H. Kleuner has asked the question in a recent article in the American Journal of Psychiatry, "Do personality Types exist?" (40). His article presented both the "pro" and "con" of the argument. Some Psychologists and psychiatrists maintain that personality cannot be classified or typed due to extreme variations in the concomitant elements. Personality is individual and varies so that no type can be considered clear cut. Others maintain that certain individuals have various traits and reactions in common and can thus be classed as definite reaction types. Such a classification when used open-mindedly gives the investigator certain criteria with which to work.

James, Jordon and others attempted to divide all humanity into psychological types (41). It was these attempts that interested Jung in a consideration of the subject. Jung thought that he could see value in both the "sex" theories of Freud and the "will to power" of Schopenhauer (42). He believed that if both could reach a fairly rational conclusion

in analysis of patients working on a premise which were so widely separated in origin, both must be a factor in development of personality and formation of neurosis and psychosis. He believed that there must be some factor not yet discovered which would include both. From this attempt at a psychological approfondissement between Freud and Adler arose Jung's tentative formulation of the introvert and extrovert types.

Jung proposed a classification of ectrovert and introvert personalities in describing habit reaction types (42). In this manner he avoided the connotation of mental illness in personality types, but described reaction types which are found to a greater or lesser degree in normal individuals, i.e., their reaction to environment.

The introvert is governed in general by subjective factors. His interests and activities center within himself and he is, in a large measure, innured to external factors. The extrovert on the other hand is governed by objective factors. His interests are projected outwardly and he reacts to his environment with apparant insensibility to inward feelings.

T. G. McLin contrasts the two main personality types found in the normal individual in various degrees of admixture and which are exposed in those individuals who have failed to make an adequate adjustment to environment (43). The personalities therefore become disorganized and disintegrated and result in true psychosis. These two main types of personality have been designated as Schizoid

and Syntoid. These correspond to the two types described by Jung as introvert and extrovert personality.

The Schizoid type of personality as described by Hoch, has a retiring; "shut-in" personality, with a tendency to seclusiveness, diffidence, shyness, and withdrawal from associations, together with inability to discuss their personal affairs or conditions in general (38). The Syntoid or Cycloid (Cyclothymic) type of personality in contrast with personality reaction of the Schizoid type, belongs to the group having free and easy associations and emotional contacts with individuals, and with an innate disposition for moodiness with fluctuations between elation and melancholia. It is this type of personality which is represented in the manic depressive psychoses.

The terms 'extro-vert and intro-vert' only have validity as referring to "states", and not to types (44). States have reference to phases of "becoming"; types have reference to modalities of "being". In other words, a man who might appear to be predominately self-absorbed, Hamlet-like, i.e., wrapped up in himself, may be in the introverted state, not because he is essentially an introverted type, but because the circumstances of his life may have confronted him with real problems which have compelled him to withdraw into himself. Probably it would be truer to say that the events of life determine the psychological state of introversion of extroversion than to say that the "type" predisposes a man to react to these events in an extroverted or introverted

manner. And again, would not introversion in many cases prove to be nothing but the inevitable psychological correlate of some organic disability? Introvert and extrovert "types are not types in the sense that the Negroid is a human type as distinct from the Mongol, or that a sympatheticotonic type is distinct from a vagotonic type in so far as these types are biological or clinical entities. It would seem therefore that the terms have much more validity in the normal personality when associated with states rather than types."

This contention can be aptly supported by a quotation from an interesting book, "The Theory of Polarity" by Geoffrey Sanisbury. In discussing the vexed question of "consciousness" he differentiates between two states of consciousness thus:

"I witness an absorbing drama; I read an exciting book: I take a decisive step under circumstances of grave responsibility; I play a game of football. In each case I experience a heightening of vitality; I am wide awake and keenly conscious of an intensity of life. But in each case this quickening of life is accompanied by self-forgetfulness. In watching the drama I forget myself in my sympathy for others. Great unselfishness belongs to all aesthetic emotion. Under the stress of responsibility I lose myself in my responsibility for the interest of others".

"On the other hand I sit lonely, inactive and depressed. When I think of my work it is not of the fascinating

problems connected with it, but of myself, my prospects, duties, salary, and so on. Words take no pattern in my mind, for I am always in my own way, with my irritating problem of how to express myself. Nor, if I am a painter, do I see reality transformed into a thousand pictures. For, to tell the truth, I am not thinking about reality, but of myself the painter, the movement to which I belong and the position which my art entitles me to take..... Try as I may, I cannot lose sight of myself. I am ever in the foreground, and little by little my eye gets dulled to the outer world and my waking mentality becomes less and less sharply distinguished from dreamland".

Sainsbury calls the first state "consciousness", the second "self-consciousness" (41). With the former is associated heightened vitality and self-forgetfulness; with the later lowered vitality, inactivity, and an incapacity for any disinterested enthusiasm. The former is a centrifugal movement (extroversion), the later centripetal (introversion). It is clear that life consists of a (rythmic?) alternation of these two phases.

It would seem that no person would be born with a predominance of either reaction state but the prevalence of one or the other movement(41). This would tend to place the whole of responsibility of character formation on environment, which has been definitely denied by some who place more stress on hereditary as a factor in formation of character. It must be remembered that heredity and environment are inextricably interwoven.

It would appear that regardless to the choice of terminology, whether we chose to designate personality types as either introvert and extrovert, Schizoid and Syntoid, the keynote of personality and behavior is in the individuals integral contact with reality. It is designated by White in his description of the insanities of Schizophrenia and manic depressive as "flight" from reality" and "flight into reality", respectively (30). Since it is recognized that man's motive in life is the satisfaction and fulfillment of certain drives and strivings, regardless of the nature of them, and desires, belong to the realm of the biological or sexual (Freud), or to the attainment of superiority (Adler). Failure to experience success in this correlative sense motivates the individual to seek satisfaction otherwise. Reality proves unsatisfactory and the unfortunate individual seeks solace in flight from reality, or in fantasy where he becomes all he could hope to be. In fantasy he is hero, and an object of worship and admiration. He feels superior to his fellowman who in reality always has appeared superior to him (36). These fantasies satisfy sexual urges. In fact, fantasy may be so successful that all contact with reality is lost and the individual may be able to recover only momentarily and then with difficulty. We have such a manifestation in typical schizophrenia (7) (5).

On the other hand we have the individual who has found himself unsatisfactory, whether motivated by inferiority or

biological conflict, who takes flight into unreality in an attempt to forget or elevate self. This we find manifested in the cyclothymic reaction of manic depressive insanity. Fundamentally it would appear that both accomplish the same purpose, in that there is an escape from reality. The one closes reality from self while the other builds for self and unreality in the environment. It is motivated by ways of thinking, feeling and reacting. Reacting is manifested in behavior, thus it becomes necessary to understand behavior in order to predict the possibility of an abnormal outcome (9) (34).

Aside from these numerous conjectures and theories advanced to explain the etiology of schizophrenia the organic pathologists have contributed no little part in this field. Nissl of Germany believes there is actual cortical degeneration (1) (28). H. Josephy also states that dementia praecox is regularly associated with changes in the cerebral cortex (36). He found a destruction of the third and fifth layers of cells of the Temporal and parietal lobes in catatonia. He believes that intramuscular injections of patients' own blood to be beneficial in acute cases. Others have described pathology of the choroid plexus, optic thalamus, glial layers, etc. (1). Many endocrinologists describe ovarian and testicular atrophy with concurrent variations in endocrine balance as the causative pathology. Facial infections and toxic factors have been blamed. All these pathological criteria are matters of controversy.

Almost all claims have been disputed or disproven. There is no definite proof or agreement as to whether actual brain pathology is present, if it is cause or effect.

McLin has found in his work at the Veterans Bureau Hospitals that in General Paresis, a study of habitus and previous personality before that personality was disintegrated by the ravages of organic brain disease, revealed these factors to have a very marked tendency to produce a psychosis resembling either Schizophrenia or manic depressive psychoses as the personality type suggested (43). These disorders of the brain such as arterio sclerosis and senile deterioration and lends one to speculation upon the presence of actual organic brain pathology in the cases of our so-called functional disorders. It has, nevertheless, been fairly well proven that the personality disorder in organic disease is a fairly late manifestation while in the functional disorders it appears to be a gradual progressive disintegration from a normal personality reaction or an abnormal accentuation of the preexisting personality reaction.

Because of the failure to demonstrate a primary anatomical relationship or a physiological concomitant of the mental disturbance of functional disorders, there has been considerable discussion of the probability of a peculiar cerebral organization or a special mental substrate for the disease (33). Among the first to clarify this matter was August Hoch, who suggested that there was a particular mental make-up or personality in most of those

those who subsequently develop Schizophrenia (38) (45).

In early years the child may have been considered quite normal. He may have learned readily in school and keep up with his companions intellectually, but he may also have taken little interest in the plays and games at school and in the home neighborhood (5). He, perhaps, was not unsocial, for he was pleasant, but he was rather quiet, with a tendency to studiousness or to day-dreaming. Later this developed into an aloofness, and he reached a stage of noticeable seclusiveness or diffidence. Then a mild degree of the special characters of Schizophrenia may have become apparent. There appeared not only seclusiveness, but inactivity, and day-dreaming may have become almost a constant state. When the patient is interfered with, because he is thought to be lazy, he may exhibit resentment. He may realize that he is not getting on in the world, but he consulted no one about his difficulties. He believes he is especially apt to be misunderstood or he is actually misunderstood and this leads to further difficulties. At times he becomes quite unsocial; he may, for instance, appear to be quarrelsome. At other times he may attempt to escape from his difficulties by wandering from home. Again, there appear obvious illusory states, in which the situations appear unusual or even unreal, and these unreal situations, give rise to peculiar reactions. Occasionally there appear hallucinations, mostly auditory and visual which are not differentiated from dream-like states. They are carried over into the waking life, and sometimes seem as if they had validity of an unusual or preternatural character.

These special characters in the personality of the individual can readily be understood to be the underlying conditions in the mental disease. When they become exaggerated the symptoms may be usually recognized as constituting a well defined psychosis. At the same time we are able to see that the predominance of certain of the personality traits are the prodromata of the similar but exaggerated symptoms in one of the forms of Schizophrenia. When the disease has flowered, the symptoms are varied, and there are four special forms, as well as the intermediate and mixed forms, which are usually recognized. The four relatively distinct forms are: the simple, the hebephrenic, the catatonic and the paranoid.

Harry Stack Sullivan is of the opinion that the occurrence of Schizophrenia is to be explained on the basis of experience rather than upon that of heredity or primary organic disorder (8). Certain people when caught in the stream of certain events, undergo a change of total activity, behavior and thought to be degree we call Schizophrenic psychosis. Two considerations arise. Are these people average people, or are they instead people predisposed by innate constitutional factors? Again: Do there exist necessary organic predisposing factors, viscious physiological factors, disease and like factors in Schizophrenia?

Only a small part of those capable of undergoing Schizophrenic processes come to such an illness. Hereditary and

somatological disorders may be of consequence but are so widely distributed throughout the population as to be of slight importance. That is, only such a small percentage of those with an inadequate hereditary or constitutional background or those whose bodies are the victims of physical disease actually develop mental disorder.

According to the theory of Adolph Meyer the manifestations of Schizophrenia are on a psychobiological basis (46) (2) (47). It is a special temperamental make-up or personality, and the symptoms may be regarded as the natural development of faulty habits of reaction or ways of feeling, thinking and acting, cultivated by the patient from his earliest years and fostered both by hereditary factors and faulty environment. These oddities in thought and behavior have been included under the behavior have been included under the general term of shut-in personality. Henderson & Gillespie in their text book of Psychiatry describe five types of shut-in personality as found in the behavior problem child:

(a) The "inadequate" type of child, who is not feeble-minded, but is entirely lacking in ambition and does not make use of his intellectual or physical powers. He has no hobbies, no likes or dislikes. Rewards or punishments mean little to him. He may play truant, but the truancy is not motivated by the desire to carry water to the circus elephant or to attend a baseball game. These hours of freedom gained through his truancy are wasted in utter idleness or aimless wandering about.

(b) The "precocious" type has a brilliant intellect.

He is serious, scholarly and a model student. He usually captures most of the prizes for academic work, but his entire life is sharply circumscribed by his books and his studies. The social life of the school or even the family mean nothing to him. He never takes the initiative in forming a friendship and responds only half heartedly if others take the initiative.

(c) The third is the "neurotic" type of child. He escapes his responsibilities and unpleasant duties by complaints of headache or other bodily ailments. He is always selfish and often tries to get by with the aid of deceit of temper tantrams.

(d) The fourth is the "day-dreamer". His chief occupation is day-dreaming. He shuns his companions with their adventures and heroics of the playground, but instead loses himself in plantacies or indulges himself in a play life peculiarly his own.

(e) Finally there is the "juvenile" type. This child never grows up emotionally. He remains tied to the proverbial mothers apron strings. He becomes hopelessly homesick when taken away from home. He never enlarges his friendships beyond his own immediate family circle. He evades responsibility but is forever seeking parental approval and protection.

In view of the five types of personality make-up included under the general term of "Shut-in" or introspective personality we find that it finally evolves itself in a matter of behavior, habit patterns and personality traits

which have their origin in earliest childhood. Habit formation becomes the dominant feature which is responsible for behavior. Habits of acting, habits of thinking, habits of judgment all determine the individual behavior towards his particular environment at any particular time. Habit formation begins almost as soon as the individual is born (6). This process takes place by imitation and the gradual adjustment of the individual within the family circle. It is conditioned by the status of the infant, the attitude of the parents but chiefly by imitation. Harry Stack Sullivan has said: "If an infant is not an idiot he will have accumulated the cultural characteristics of his family by the time he is a year and a half to two years old. He will be typically Irish, Italian or east-sider, or what not" (8).

Why do not all who present a Schizophrenic personality develop the psychosis? Sullivan states that only a small percent of those capable of developing the Schizophrenic psychosis ever do (8). This is a matter of general observation and has been definitely proven. Gibbs has stated that in the normal individual presenting one or the other type of personality there is a more or less admixture of the opposite type which exerts a balancing effect and prevents the progression to one or the other extreme (48). In other words, in the normal individual of Schizoid personality there is enough of the cycloid qualities to maintain an equilibrium with respect to contact with society and reality. Habit formation is undoubtedly a huge factor in the development of personality

and in the development of a psychosis but it fails to explain all (49). Heredity and constitutional factors play a considerable part but these also have limitations. Hoch has said "The pathological personality with the milder manifestations and the psychosis with its more complete break of compensation may be looked upon as determined by constitutional factors in the sense that when the demand for adaptation arises, the individual is found unfit to meet them; unfit through inherent weakness; but also at times to quite an extent through false attitudes which have developed through lack of proper training (45).

Adler has stated that the period of unrecollection of childhood is the the purposeful handiwork of nature (24). It is his idea that all the wishes, desires and strivings of an individual arise from a sense of inferiority in childhood, inferiority to adults in their environment and inferiority due to the lack of an understanding of the wishes and strivings of those with whom he comes in contact. If this sense of inferiority were not forgotten it would most surely handicap the individual in attaining a normal life among others(36).

J. Kasanin and Z. A. Rosen have attempted to work out the clinical variables of the Schizoid personality (39). They have made an analysis of a large number of personality traits both for the pre-psychotic stage and for the adult or personality traits which he presented previous to the time of admission, and have attempted to determine the re-

relationship between the pre-psychotic state and the actual psychosis. The state: "The relation between pre-psychotic personality and psychotic manifestation has been observed by many writers. Especially in the consideration of the functional psychosis, the affective and Schizophrenic disorders, a dichotomy of personality types has been assumed and has led on the one hand to the concept of the extroverted, cyclothymic or syntonic personality as associated with the affective disorder, and, on the other hand, that of the introverted, schizoid or shut-in type usually in the Schizophrenic breakdowns".

The background for this investigation was taken arbitrarily to include traits that are most commonly considered the case in Schizoid personality.

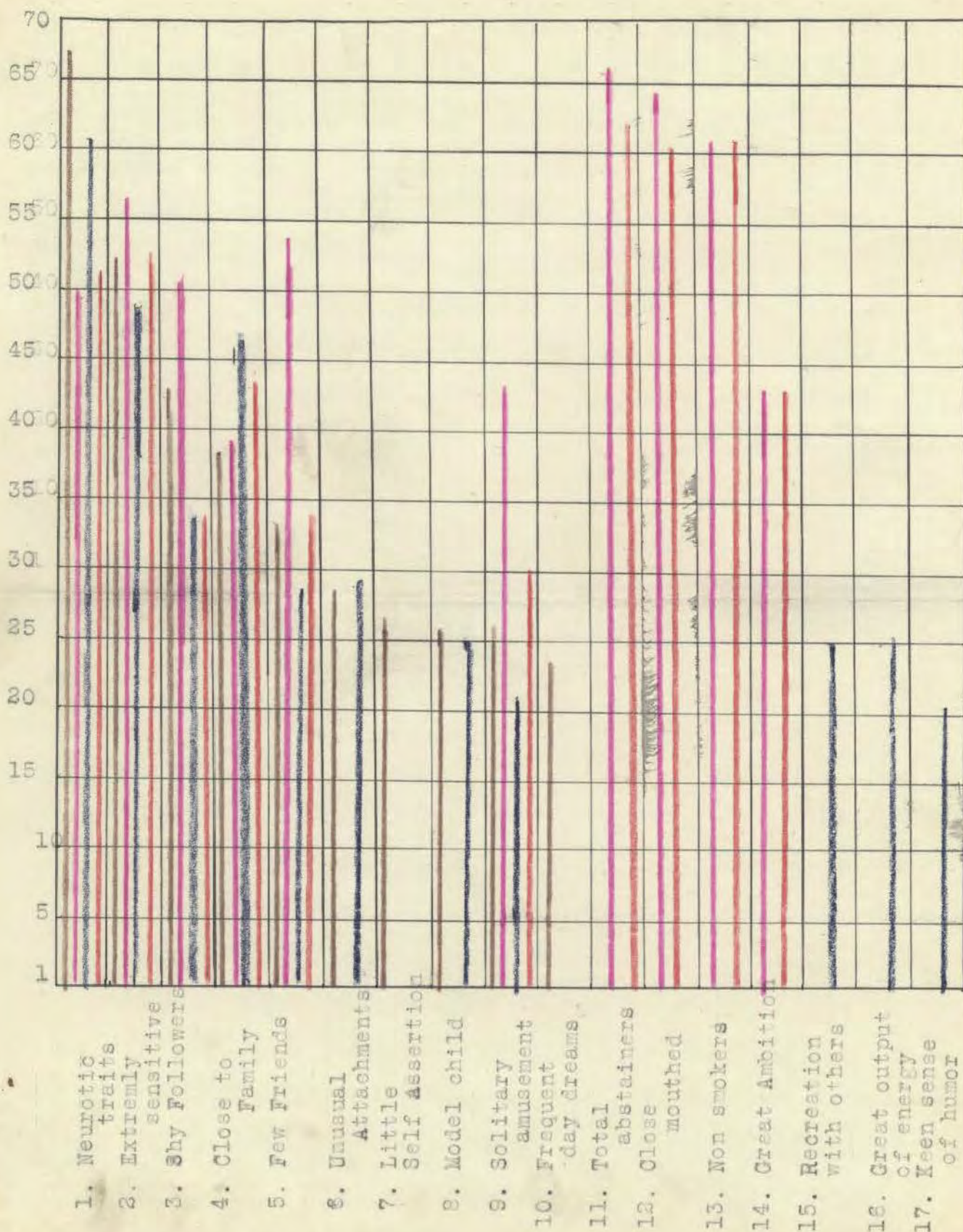
Two main questions have been the dominant drive in this investigation: 1. In patients with similar personalities who are known to have been shy, seclusive, sensitive and close-mouthed (they type of traits which stamp the individual as being different in the community), is there any similarity in the clinical picture when they break down? 2. Can the Schizoid personality be designated by such a constellation of personality traits?

The arbitrary criteria which were selected to delineate Schizoid personalities were those traits relating to friendships, recreations, reactions to social groups, communicativeness and sensitivity. The Schizoid extreme of these traits can be said to be the nucleus of the Schizoid personality.

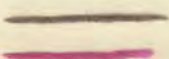
They examined and analyzed 151 patients known to be Schizophrenics and have set down the ten most frequent personality traits found with the percentage at which it was found to occur. Furthermore these traits were taken in child behavior traits of the same patients as compared with the adult manifestation.

CHILDHOOD		ADULT	
1. Neurotic traits	69.9	Total Abstainers	66.8
2. Extremely sensitive	52.3	Close-Mouthed	65.6
3. Shy, followers	43.0	Non smokers	61.5
4. Close to family	38.4	Extremely sensitive	56.8
5. Few friends	33.8	Few friends	53.6
6. Unusual attachments	29.8	Shy followers	51.2
7. Little self assertion	27.1	Neurotic traits	50.4
8. Model child	26.4	Solitary amusements	43.2
9. Solitary amusement	25.2	Great ambition	43.1
10. Frequent day dreams	23.8	Close to family	39.2

The chart above is more or less self explanatory. First we see that Schizophrenic traits are gradually and progressively increased, being higher in percentage in their manifestation as the individual approaches the break. The traits mentioned are all closely related to the Schizophrenic personality and we must assume that they were present in more or less multiplicity in each individual. In childhood it is observed that neurotic traits have been prevalent in the highest percent. This trait is indefinite and just what the author desires to include is not know. He perhaps refers to the neurotic type of shut-in personality as described by Henderson & Gillespie; i.e., the child with hypochondrical complaints which he uses to side step the demands of adjustment (28). The other traits are about in proportion that one would expect with the exception of day-dreaming. It is our opinion that this trait is under-rated.



Schizophrenic Child
Schizophrenic Adult



Mixed Group Child
Mixed Group Adult



If we would follow the concept of Bleuler who believes that day-dreams, to a more or less degree, are present in close to 100% of the people, but the degree to which they replace reality in adjustment to situations is undoubtedly much lower(10).

On the other side in the manifestation of traits in the adult we find two traits leading the list which are "Total abstainers" and "Non smokers". Why, we ask are two traits, often looked upon as moral attributes, so prevalent among the maladjusted? They, no doubt, can be explained upon the basis of a rigidity of personality. W. Muncie has observed that this rigidity of personality is an extremely prevalent trait among the psychotic patients under his observation (37). He states that these individuals develop a rigid code of ethics, pride, moral ideals, etc., to compensate for an inferiority in adjustment to aspects of society. It gives them something stable upon which to feel secure and superior to those who fall beneath their code. A break in this code due to situations of disappointment lead to depressions and development of paranoidal symptoms. Muncie has also observed that a readaptation of these patients in improved cases have developed another code of ethics equally rigid, or more so, upon which they are able to again build security.

Kasanin and Rosen have also examined a series of 327 first admissions to a State Psychiatric Hospital regardless of diagnosis which included the 151 cases of Schizophrenic patients previously examined, their object to determine if the same traits would predispose to any psychosis.

CHILD		ADULT	
Neurotic Traits	61.6	Total Abstainers	
Extremely Sensitive	49.5	Non Smokers	
Close to family	45.9	Close-mouthed	
Shy followers	33.1	Extremely sensitive	
Unusual attachment	29.1	Neurotic traits	
Few friends	28.8	Valuable workers	
Model child	25.7	Close to family	
Recreation with others	25.4	Great ambition	
Great out-put of energy	25.0	Few friends	
Little Self assertion	23.5	Very sympathetic	
Solitary amusement	22.9	Shy followers	
Keen sense of Humor	21.7	Solitary amusement	

The results from the observation of J. Kasanin and Rosen are in the final analysis rather indefinite due perhaps to the fact that it is not complete. According to the accompanying graph it would seem that neurotic traits in Schizophrenic children are more prevalent than in the total pre-psychotic children admitted though only to a slight degree. In its comparison with the adult traits which are present in about equal ratio with both the Schizophrenic group and the mixed group. It would appear that neurotic traits in children are as important as the pre-psychotic traits which predisposed to a maladjustment regardless of the type of disorder.

In the second trait-that of extreme sensitivity-it is found in practically equal proportion in the Schizophrenic group and mixed group. In both instances it is slightly higher in percent in the adult manifestation than in the child and probably is due to an increase in this trait as the maladjustment development.

The trait of shy followers it is seen to be distinctly Schizophrenic in both the child and adult manifestation with an accentuation in the adult.

In the fourth trait-that of "close to family tendency"- it is found to be a trait more prevalent in the mixed group than in the true Schizophrenic group; and in about equal ration in child and adult of the Schizophrenic group. In the Schizophrenic group the withdrawal to self has prohibited even contact with family. It is not qualified if the contact with family excluded contact with outsiders.

In the fifth trait we see that "few friends" is predominantly a Schizophrenic reaction, more marked in adult than in children and manifested in this ratio largely because the peculiarities which prevent the forming of friendship and the withdrawal from contacts as the maladjustment develops.

"Unusual attachments" is definitely a childhood trait in this series and not included in the traits of the adult. It is in approximate equal ratio in the Schizophrenic group as the total group with a slight increase in the total group.

"Little self assertion" is apparently a trait found only in the Schizoid child in this particular series. It should, we believe, have a place among the Schizophrenic adult group.

The "model child" is naturally a childhood trait and slightly higher in the schizoid than in the mixed group.

"Solitary amusement" shows a peculiar configuration. It is in about equal ratio for the child and the adult in both the Schizophrenic group and mixed group; and in immense ratio to the number of the Schizophrenic group as

compared with the mixed group. It might be interpreted that only the Schizoid group presented the trait. The fact of the higher ratio in adults can be accounted for by the more pronounced withdrawal into one's self as the Psychosis develops.

"Frequent day-dreams" is listed as being only a trait of the Schizoid child.

The next four traits - including those of abstinence of both liquor and tobacco are definitely adult traits and as has been pointed out a mark of rigid personality which predisposes to a psychotic break (37). The trait of being "close-mouthed" is undoubtedly due to a gradual withdrawal from external contacts. "Great ambition" undoubtedly has very little bearing as a trait upon the development of a psychotic personality except when viewed in the light of artistic thinking or phantasy ambition (ideas of great ambition with very little movement in the direction of accomplishment).

J. W. Williams in his discussion of normal personalities recognizes the schizoid and syntoid personality and their relation to worldly accomplishments (50). He has said that the Schizoid is the thinker while the Snytoid is the doer. In this sense of the word ambition would have little or no bearing on psychotic outcome. If the word ambition is interpreted as meaning energy output, it would be considered as one of the deficiencies of the Schizoid reactions (51).

Lastly, there are listed a group of five traits which

are definitely syntonic and which were entirely absent among the most common traits of the Schizophrenic group. These are: Recreation with others, Great output of energy, Keen sense of humor, Industrious work habit and Excessive sympathy.

Kasanin observations would not doubt be more valuable if it could have been worked out for the syntonic type separately so that the contrast could be noted (39). A still further falacy lies in the fact that there is as yet no satisfactory unit upon which to measure personality traits. Kasanin has stated, one reason for the dissimilarity in the clinical picture in the Schizoid groups is probably due to a difference in constitutional environmental influences and life experiences.

Only a small part of those capable of undergoing Schizophrenic processes come to such an illness. Hereditary and somatological disorders may be of consequence but are so widely distributed throughout the population as to be of slight importance. That is, only such a small percentage of those with an inadequate hereditary or constitutional background or those whose bodies are the victims of physical disease actually develop the mental disorder.

It has been mentioned that Schizophrenia presents a tremendous problem to humanity in that it incapacitates more individuals yearly than does tuberculosis and cancer combined (1) (46). So far the medical profession has been relatively helpless in achieving a form of therapy satisfactory to combat it. Even less has been done than in the case of either tuberculosis or cancer. It would seem the rationale in the treatment of Schizophrenia, as in the case

of Tuberculosis, cancer, Smallpox, Yellow Fever, Malaria and a myriad of other diseases, which were at one time a scourge to humanity, is by prevention.

Is it possible to apply preventative measures to Schizophrenia and mental disorders in general? This would seem the most probable course. If we have a definite and clear understanding of the normal mental functions, and a clear concise picture of the abnormal manifestations, and are able through an understanding of the psychological processes that bridge the normal and abnormal, we shall be able to recognize along this route abnormalities of behavior and reaction which go to form the personalities of the individuals who are destined to develop the definite neuroses and psychoses. We should be able, through an understanding of mental processes, to aid such individuals to readjust themselves into proper channels of thinking, feeling, and reacting so that the horrible outcome of mental illness can be prevented.

We have dealt, so far, largely with the environmental element in the development of personality. It is unfortunate that heredity is largely without our control, becoming a problem for the socialologist. The psychiatrist is called upon to treat the individual regardless of the biological background. We may, if we are humanitarians, do much to encourage the developments of hereditary products through advice to those who are about to mate and procreate, and through more stringent legislative means. We are, however, limited in our power to improve this latter important element. Environment itself is hard to change except through humanitarian and pedagogical channels. We are left the former channel through which we

should be little hampered.

The psychiatrist has little opportunity to exert his influence upon those who need it most. This is largely through the fear of the lay public of insanity and the feeling of stigmata connected with it. And the inability of both lay and professional public as a whole to recognize the formative abnormalities which lead to mental disorder. The psychiatrist rarely sees a Schizophrenic until the patient is ready to be admitted to a mental hospital. At that time, as Franz Alexander has so ably stated, "The battle has been fought and won on the side of Schizophrenia." "There is little left for the psychiatrist in the light of reconstruction among the destruction and ruin of the Schizophrenic mind". (29)

The responsibility rests upon the shoulders of individuals and general practitioners of medicine who are able to make the early contacts with the individuals just as he is beginning to maladjust. It is the responsibility of all physicians to educate the public concerning the abnormalities which are the forerunners of Schizophrenia. It is the duty of all physicians to advise and readjust the unfortunate individuals and if such therapy is beyond his art, it is only ethical to place the patient in the hands of a psychiatrist competent to manage such cases.

Levin summarizes, "as in the fight against tuberculosis, the psychiatrist must educate the public which comes in contact with the child --to be Schizophrenically minded. Family physician, nurse, pediatrician, educator, recreational director, social worker and above all the parent must come to recognize

and forestall the oddities of behavior which are the forerunners of Schizophrenia." (46).

BIBLIOGRAPHY

1. Strecker and Ebaugh. Clinical Psychiatry. Philadelphia: Blakiston. Third edition. 1930 Pp 287-339
2. Meyer, Adolph. Role of mental Factors in Psychiatry. Amer. J. Psychiat., 65: 39-56 1908
3. Bleuler, E. Text book of Psychiatry (Trans. by A. A. Brill) New York: Macmillan, 1924. Pp 373-435
4. Burr, C. W. Mental Disorders of Childhood. Amer. J. Psychiat., 5: 145-161 July 1925
5. Association for Research in Nervous and Mental Diseases. Schizophrenia. New York: P. B. Hoeber, inc., 1925.
6. Hamil, B. M. Behavior Problems in Children. Journ. Mich. S. Med. Soc., 31: 373- 1932
8. Sullivan, H. S. Environmental Factors in Schizophrenia. Med. J. and Rec., 133: 19-27 Jan. 7, 1933.
9. Boltz, O. H. Factors which Determine a Schizophrenic (Dementia Praecox) reaction in Males. J. Nerv. & Ment. Dis. 64: 589-615 Feb. 1926
10. Bleuler, E. Autistic Thinking. Amer. J. Insanity. 69: 867- July 1913
11. Phillips, R. A. Comparison of Behavior Problems of Child with Mental Abberation in Adult. Ohio State M. J. 25: 802- Oct. 1929.
12. Gessel, Arnold. The Individual in Infancy. Chapt. 16. Foundation of Experimental Psychology. Worchester, Mass. Clarke University Press. 1929 Pp 625-659
13. Diathelm, Oskar. Nonorganization and Disorganization of Personality During Psychosis. Arch. Neurol. & Psychiat. 29: 1289- June 1933.
14. Petry, H. K. Role of Personality in Determining Type of Functional Disorder. Penn. M. J. 34: 294- Feb. 1931
15. May, Mark A. Adult in the Community. Chapt. 19. Foundation of Experimental Psychology. Worchester, Mass.: Clarke University Press. 1929 Pp 766-768.
16. Watson, J. B. Psychology from Standpoint of Behaviorist. Philadelphia: Lippencott. 1919 Pp 392---
17. Warren, H. C. Human Psychology. Boston: Houghton, Mifflin. 1919. Pp 383---
18. Allport, F. H. Social Psychology. Boston: Houghton, Mifflin. 1924 Pp 101---

19. Woodworth, R. S. Dynamic Psychology.
New York: Columbia Univ. Press. 1918 Pp 214-240
20. Wile, Ira S. Shaping the Personality of the Individual.
Med. J. Rec. 133: 539-546 June 3, 1933
21. Tansley,
22. Bigelow, N. J. T. Prepsychotic Personality of Catatonic
Schizophrenics. Psychiat. Quart. 6: 642-- Oct. 1932
23. Gardner, W. E. Psychopathic Personalities.
Kentucky M. J. 29: 411-- August 1931.
24. Adler, Alfred. The Neurotic Constitution.
New York: Moffat, Yard and Company. 1917.
25. Amsden, G. S. Mental and Emotional Components of Personality
in Schizophrenia. Research in Nerv. & Ment. Dis. Proc.
5: 133-138 1928.
26. Freud, Sigmund. General Introduction to Psychoanalysis.
(Trans. by G. Stanley Hall) New York: Boni and Liveright 1920.
27. Hart, Bernard. Psychology of Insanity.
London: Cambridge University Press. 1929 Pp 50-59
28. Henderson and Gillespie. Textbook for Students and Practitioners.
Third edition. London: Oxford University Press 1923.
29. Alexander, Franz. Schizophrenic Psychosis.
Arch. Neuro. & Psychiat. 26: 815 Oct. 1931
30. White, W. A. Outline of Psychiatry.
Washington: Nervous and Mental Disease Publishing Co. 1929.
Pp 23-24
31. Levy, John. The Impact of Cultural Forms on Children Behavior.
Ment. Hygiene. 16: 208-- April 1932.
32. Kempf, E. J. Psychopathology. St. Louis: C. V. Mosby & Co. 1920
Pp 96-154.
33. Franz, Shepard I. The Abnormal Individual. Chapt. 21.
Foundation of Experimental Psychology.. Worchester, Mass.:
Clarke Univ. Press. 1929 Pp 821-826
34. Brill, A. A. Psychotic Children
Amer. J. Psychiat. 5: 357-- Feb. 1926
35. Kretchmer, E. Physique and Character.
New York: Harcourt, Brace. 1925.
36. Wexberg, Irving. Individual Psychology. (Trans. by W. Bernan Wolfe)
New York: Cosmopolitan Book Corp. 1929 Pp 1-186

37. Muncie, W. Rigid Personality as Factor in Psychosis.
Arch. Neurol. & Psychiat. 26: 359-- Aug. 1931
38. Hoch, August. Early Manifestations of Mental Disorder.
New York: Proc. Ment. Hygiene Conf. 1912 Pp 201-203
39. Kasanin, J. & Rosen, Z. A. Clinical Variables in Schizoid Personalities. Arch. Neurol. & Psychiat. 30: 538-566 Sept. 1933.
40. Kleuner, H. Do Personality Types Exist?
Amer. J. Psychiat. 10: 781-- March 1931.
41. Culpin, M. Recent Advances in Psychoneuroses.
London: J. A. Churchill. 1931. Pp 243
42. Jung, C. G. Psychological Types.
New York: Harcourt, Brace. 1926 Pp 86-95.
43. McLin, T. G. Schizoid and Syntoid Personality.
Med. Bull. Vet. Admin. 7: 748-- August 1931.
44. Young, James C. Discussion of Jung's Psychological Types.
Culpin: Recent Advances in Psychoneuroses.
London: J. A. Churchill 1931 Pp 246-252
45. Hoch, August. Constitutional Factors in Dementia Praecox Group.
Rev. Neurol. & Psychiat. 8: 463-- 1910
46. Levin, H. L. Role of Child Guidance in Schizophrenia.
N. Y. State M. J. 33: 805-- July 1, 1933
47. Meyer, Adolph. Constructive Formulation of Schizophrenia.
Amer. J. Psychiat. 1: 346-355 Jan. 1922
48. Gibbs, C. E. Relation of Puberty to Behavior and Personality in Patients with Dementia Praecox. Amer. J. Psychiat. 3: 121-129. July 1923.
49. Pollack, H. M. et al. Heredity and environmental Factors in Causation of Schizophrenia. Psychiat. Quart. 7: 450-- April 1933.
50. Williams, J. W. Personality.
Med. J. & Rec. 135: 355 April 6, 1933
51. Wilson, D. C. Outline of Personality Study for Office Use.
Virginia Medical Monthly. 60: 1-4 April 1933
52. Childers, A. T. Study of Some Schizophrenic Children.
Ment. Hygiene. 15: 106-134 Jan. 1931
53. Wile, Ira S. Health in Relation to Personality.
Med. J. & Rec. 137: 353-356 May 3, 1933
54. Kahn, E. & Cohen, J. H. Potentiality for Change in Personality.
Amer. J. Psychiat. 12: 523-529 Nov. 1929

55. Kraepelin, E. Textbook of Psychiatry, Dementia Praecox and Paraphrenia. Edinburgh: Livingstone. 1926 Pp 328
56. Davie, T. M. Jung's Theories of Psychological Types. Journ. Ment. Sc. 79 274-285 April 1933.
57. Morton, C. J. Childhood Fears. New York: Macmillan & Company 1925