

ALLERGEN RESEARCH AND ITS IMPLICATIONS
FOR PSYCHOLOGY: HISTORY, CURRENT
STATUS, AND PROSPECTUS

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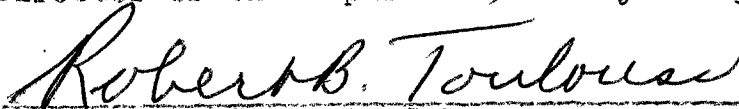
Major Professor



Minor Professor



Director of the Department of Psychology



Dean of the Graduate School

W W W

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The purpose of this manuscript was to present a brief history, the current status, and a prospectus of allergen and allergic reactions. Research on allergic reactions, particularly as viewed from the psychogenic position, was presented. The review strongly suggests that the psychogenic orientation has been fraught with contradictions, unnecessarily complex interpretations, and an over-abundance of subjective, dynamic, and analytic redundancies which have done little more than perpetuate the stagnation of a rather important subdomain of the "mental" health professions. As a point of departure, and in contrast to the psychogenic position, contemporary research into allergens and allergic reactions conducted by allergen specialists and other somatically oriented investigators, appears to offer support for the position that many "psychic disturbances" do have a distinct, and demonstrable allergen-organic genesis. Cytotoxic testing, as well as related techniques and investigatory directions into allergens, allergic reactions, and allergen reactors, were discussed within the context of their implications for a modification and re-evaluation of various presumed "psychic" symptomologies and disturbances.

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THESIS

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J. Steven Arnold, B.A.

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ALLERGEN RESEARCH AND ITS IMPLICATIONS
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A Review of the Psychological
Literature on Allergens

It would appear that allergic reactions in the form, among others, of asthma, vasomotor rhinitis, allergic rhinitis, bronchitis, urticaria, and contact dermatitis, has always been one of man's maladies. From the time of Hippocrates to the present, much effort has been centered on the study of allergies, allergens, and related reactions.

A great deal of psychological research, have always been directed towards an attempt to understand the "cause" of allergic reactions. Some researchers have concentrated on the role the mother plays in the development of an allergy (Miller, 1952; Jessner, 1955; Long, 1958; Abramson, 1961). Other studies have emphasized the general effect of the emotions (de Souza, 1949; Prout, 1951; Van Pelt, 1953; Bacon, 1956; Knapp, 1957; Rees, 1959; de Boor, 1961; Reca, 1963; Wright, 1965) in the development and maintenance of allergic reaction. Instead of concentrating on one specific cause of allergy, other researchers have attempted to construct a multiple-causation theory of allergy by combining genetic, constitutional, hereditary, psychogenic, and allergic infective

factors into their theoretical orientations (Prout, 1951; Knapp, 1953; Mohr, 1953-1954; Rees, 1956; Bender, 1963; Rees, 1964).

Research has also attempted to relate time of maturation and etiology of asthma (Bostock, 1956) into a possible causal relationship, and there are studies suggesting that asthma, as a form of allergy, is a learned response which serves to defend the individual against forces in his environment with which he can not cope more adaptively (Turnbull, 1962; Baraff, 1965).

From 1949 to 1967 there were many studies which investigated the effects of allergy on personality, as well as the effects of personality on allergy. For instance, two studies were performed which "found" that allergic children were rejected more by their mothers than children who were not rejected, implying a negative filial relationship (Miller, 1949; 1957). Another study of maternal attitudes did not support these findings (Cutter, 1955), and found no differences between asthmatic mothers and mothers of children with other ailments. A number of other studies have investigated the "character traits" of allergic children in the hope of discovering a personality type particularly receptive to allergens. The researchers concluded that asthmatic children have greater "fear of separation" from a mother figure and greater difficulty in crying and confiding in the mother (Harris, 1950).

In studies of asthmatic personality traits done after 1950, researchers attributed the following character traits to asthmatics: (1) they characteristically turn hostility against themselves (Miller, 1950); (2) depression and rage were the chief emotions associated with the asthmogenic patient (Lovett-Doust, 1953); (3) the dominant character traits were sensitivity, receptivity, passivity, anxiety, repression, and self-assuredness (Pontius, 1953); (4) they showed an "intense clinging dependence" as a major area of conflict (Knapp, 1957); and further, the asthmatic "personality" was characterized by conflict and a high degree of emotional tension without appropriate relief (Alcock, 1960). None of the foregoing studies was able to demonstrate the order of occurrence: allergy first or "allergic" personality first.

In pursuing the "character" problem from a different aspect, studies were conducted which reported that some of the personality problems of allergic children were metabolic in origin (Rhodes, 1952); and when the allergic element was eliminated, the character problems were also eliminated (Clarke, 1950). This area of research is also quite contemporary among allergists, and will be expanded upon in a later portion of this paper.

The treatment of allergic patients has always been of some concern for the practitioners of psychology, and there are few psychologic treatment regimens which have not been

utilized. The methods of treatment have been as varied as the theoretical background, biases, and personal idiosyncracies of the attending professional. Where the retention of asthmatic symptoms was seen as having an emotional etiology (Aston, 1959), a number of asthmatic cases responded well to hypnosis, which removed conditional response patterns (Marchesi, 1949), seen as symptoms of underlying nervous disorder (Van Peit, 1953). Hypnosis has also been used to "conquer" the reflexes which were not physiological and replace them with responses which re-established the patients' normal breathing patterns (Brown, 1965).

Another method of treatment which has been used frequently is group therapy. Group therapy has been employed to help the patient deal with his "affect hunger" and to express his anger (Miller, 1955). It has also been used as an aid in working with the parents of allergic children (Miller, 1955). Group therapy has, on occasion, been combined with individual psychotherapy (Stokvis, 1955) in order to provide a framework for better "reality adaptation" and amelioration of psychogenic asthma (Clapham, 1958). This combination has also been used to decrease patient morbidity (Reed, 1962) and benefit patients with cathartic-suggestive and psychogogic effects as well (Stokvis, 1959).

In considering treatment for an allergic child, it has been suggested that there should be considerable preparation regarding the family, with careful consideration of the

family-health team relationship, to secure a balance of values in the practicing staff (Friend, 1954). It has been recommended that every "problem child" deserves to be seen by a pediatrician for possible physical defects, a child psychologist to uncover any hidden phobias, and an allergist if there is a family history of allergy (Clarke, 1952). Residential treatment centers where programs exist for the treatment of emotional and psychological factors contributing to illness have reported some success (Hallowitz, 1954).

Drugs have also been utilized in the treatment of the allergic patient. The employment of drugs typically occurs where there is a suspected psychogenic component that must be treated before clinical improvement may be expected (Eisenberg, 1957). In such treatment programs, tranquilizing drugs have been administered in order to "block" certain neuron pathways adversely affected by anxiety and tension (Eisenberg, 1957).

Over the past six years some very minimal and sporadic changes have been apparent in the literature regarding the etiology of allergy, the "personality" of allergen reactors, and treatment procedures. In looking for the cause of allergic disorders, recent investigators have again mentioned the interaction of both psychologic and biologic predispositional factors in the allergic patient (Jacobs, 1967). At least one study, however, (Block, 1968) failed to support the "psychosomatic hypothesis" of many studies which required that the

allergic patient must evidence both somatic and psychological factors. A later report assumed a "psychiatric" outlook and reported that researchers often overlook the importance of conditioning factors due to a traumatic event or experience in the development of the illness (Alvarado, 1971). Alvarado (1971) also suggested that researchers should explore more carefully the important events in the patients' life that have a temporal connection with the beginning of an allergic syndrome. It would seem, then, that research into the etiology of allergy has not changed over the years with, perhaps, the exception that there may be an increasing appreciation of somatic factors as possible predispositional variables in an allergic reaction.

In reviewing recent studies on personality and allergic patients the situation is much the same as with the earlier research on the etiology of allergy. Much of the investigatory efforts appear to be duplicative and redundant. A study investigating "mood states" accompanying asthma attacks in children "found" that during asthma attacks anxiety, inability to concentrate and deactivation increased (Weiss, 1966). A review of the literature on psychopathological factors in bronchial asthma put forth pathogenic factors such as (1) an obsessive-compulsive or depressive parental personality structure, (2) a dominant mother and passive father, (3) an overprotective mother in the allergic child's home situation (Studt, 1968), with the child being dominated by egocentric,

narcissistic desires, oral or anal fixations and depression. These results seem to reflect the psychological orientation of the researchers and shed little light on causal relationships. Another study "reaffirmed" that the asthmatic child should be considered as suffering from an emotional as well as a physical disorder (Vesely, 1969). This is again in keeping with past research, however, a study by Spiegelberg (1970) reported no differences between allergic and nonallergic subjects with regard to ambitions, moods, drives, or emotions. Furthermore, there were no significant differences found concerning ideological and religious influences, types of broken homes or "dynamic urges." Conflicting results such as these should serve to point out the rather tenuous nature of the hypothesized stereotyped "allergic personality."

The recent psychological literature on the treatment of allergic disorders has also included the suggestion that separation of chronic allergic asthmatic children from their parents reduces asthmatic symptoms (Pruce11, 1969) when the children were placed in a residential treatment facility (Freund, 1970). Recent studies have again suggested the importance of recognizing psychological as well as physiological stress in the allergic patient (Sanger, 1970). To achieve a homostatic rebalance in the allergic patient, due consideration must be given in determining to which specialist the patient should be referred, that is, internist, allergist, or psychologist (Steinhardt, 1970).

In another treatment procedure Loparollo (1971) proposed a method for evaluating the impact of psychologic stimuli on asthmatic patients by measuring airway reactivity in the patient. This experimental model may be of value in determining the extent of the role that psychological factors play in the maintenance of allergic symptomology, but to date it has seen little use with no acceptable compilation of empirical support for the technique.

Still another "new" approach in the treatment of allergic asthmatics is through the use of behavior modification techniques such as desensitization in conjunction with group therapy (Reckless, 1971).

Perhaps this review could be extended with the explanatory constructs and treatment procedures elaborated; however, it is believed that such an extension would add little to the readers' general impression of the manner in which psychology has dealt with allergies and the allergy patient. It would appear that the psychologist has been inclined to strongly, sometimes adamantly, regard an allergy as the reflection of a psychosomatic or psychogenic malady, and reject any position which proposes a predominantly somatic etiology.

Etiology of Allergy from the Medical Standpoint

In a review of research being conducted on allergic reactions by allergists, one finds the somatic position favored. Most literature from the allergist camp supports

a physiologically based etiology of allergic reactions which, in turn, is functionally related to pseudopsychological disturbances.

Before one can accurately study allergic reactions from the medical viewpoint it is necessary to be familiar with some common characteristics of allergy and allergic reactions. Allergy is frequently reported as an abnormal physiological reaction to a "normal" physiological substance. This abnormal reaction may be an inherited characteristic (Speer, 1963; Sanders, 1971; Rowe, 1972), but the degree of sensitivity and the tissue affected (shock organ) is not inherited. Allergy exists in all types of climates, in all races, and in every age group. A person may be sensitive or allergic to any or all substances, with the allergenic factor being a protein or a polysaccharide. An individual can be exposed to allergens by inhalation, injection, ingestion, or contact (Speer, 1963; Allergy Foundation of America, 1967; Sanders, 1971; Rowe, 1972). The two most common types of allergic reactions result from ingestion and inhalants with contact, drug and insect sting also contributing to allergic reactions though with much less frequency than ingestion and inhalants (Allergy Foundation of America, 1967).

Allergist Research on Psychological Manifestations

Allergists have long held that allergic reactions, caused by the body's antibodies trying to expel the allergen

to which it is sensitive, can cause disturbances such as migraine, epilepsy, dizziness, temper tantrums, irritability, depression, clumsiness, rapid mood fluctuations, tinnitus, fatigue, confusion and poor manual behavior (Speer, 1963; Rowe, 1972). Most psychologists would agree that the above symptoms are found in neurotic and psychotic disturbances, but the dispute arises between the psychologist and allergist as to the etiology of these disturbances. Davison (1971) holds that there is a "unified field theory" operating and that both infectious physical states and psychic factors combine in the production of allergic disease with the stress from either the physical or mental environment producing allergic symptoms. Few would doubt this in some cases of allergic individuals, but there is evidence that many disturbances are primarily physiologically determined.

Within the last fifty years increasing accounts have been published of symptoms and disabilities arising from allergic reactions in the brain, spinal cord, cranial and peripheral nerves which have been alleviated by the elimination of offending foods and by the management of inhalant, chemical and drug allergens. This relief has been attributed to the control of neural and cerebral allergy (Rowe, 1972). As physicians and related somatically oriented specialists gather more data on the ubiquity of allergic reactions, for instance in allergic reactions effecting various tissues or organs, including the central nervous system, it would seem

that more relief may be in the offing, and a wider variety of effective treatments may be available to people suffering from "nervous" conditions (Speer, 1958). Some allergists hold that the solution of many epilepsies, migraine and other paroxysmal disorders, including many psychoses, will be found through the study of allergy and a fuller appreciation of its somatic basis (Gracies, 1924; Kennedy, 1936; Rowe, 1972). Allergists of this persuasion believe that these disorders are caused, at times, by urticarial-like lesions in the meninges of the brain or cerebral cortex, or to sudden vascular spasms which elicit pressure on the brain (Rowe, 1972).

Allergists have also seen patients with profound "psychic disturbances" which were caused by food allergies. It is thought that if severe disturbances are due to food allergies, many milder symptoms may also have a similar etiology (Rowe, 1972). Research early in this century (Vallery-Radot, 1931) reporting the establishment of depressed "maniacal" spells with urticaria, found a concomittant depression of the white blood cell count indicating sensitization to an allergen. Research today by allergists is turning up similar functional relationships in disorders that previously were subsumed under the exclusive rubric of psychogenic illness (Rowe, 1972).

Food allergies are usually the most common cause of "psychological symptoms" arising from allergic reactions, but inhalent allergy may also be implicated (Speer, 1963; Rowe, 1972).

One of the most commonly recognized allergic syndromes is the "allergic fatigue and toxemia syndrome." This is characterized by fatigue, weakness, not being rested upon arising, lack of energy and ambition, drowsiness, depression, inability to concentrate, and emotional instability (Speer, 1958; Speer, 1963; Rowe, 1972). This syndrome is seen in both children and adults. In a study reporting on twenty four cases (Clarke, 1950), the recognition and control of specific food (and inhalant) allergies relieved a variety of symptoms in children; symptoms often considered to be singularly psychosomatic, such as irritability, "fuzziness," inattentiveness, somnambulance, enuresis, and lack of motivation and interest.

In the case of children, it is especially important to be aware of allergic/psychological symptoms. The child seems irritable and listless, or appears fatigued and "run-down," which often precipitates the parents' initial interest in seeking professional assistance. The parents may be concerned about the child's lackadaisical attitude, apathy, irritability, unhappiness, peevishness, and unpredictability (Speer, 1963). The severity of symptoms varies from child to child, but the more severely affected child may manifest severe neurological and "psychological" symptoms, including paresthesia, facial tics, severe "personality" disturbances and even psychotic behavior. When elimination diets or immunotherapy are used these symptoms are alleviated in the allergic individual (Speer, 1963; Rowe, 1972).

Based on many years of observation and research there seems to be increasing evidence that a functional relationship exists between allergies and many quasi-psychological manifestations. More and more allergists are hypothesizing, and seeking empirical data, on the question of recurrent "mental" symptoms, such as, depression, melancholia, and various "personality" changes being allergic in origin (Rowe, 1972). In the area of food and inhalent allergies, study has been given to considering allergies as major or complicating factors of psychosis, particularly when clinical symptoms of allergy are seen in the history or physical examination of the patient. Sulzberger (1936) for instance, has reported cases of alcoholic psychosis occurring only when rye whisky was ingested. Other studies have also implied that respiratory defects and allergy are associated with alcoholism (Hawkins, 1938). It has been suggested that the recurrent nature of many psychic disturbances should be studied from the viewpoint of an allergen etiology because they parallel many of the cyclic characteristics seen manifest in the food and inhalent allergy patient (Rowe, 1972).

The above should not be taken as a proposition that all "psychic" disturbances have an allergic etiology, but it would appear quite likely that allergens play a much larger role in psychological disturbances than psychologists presently acknowledge. Allergists are cognizant of the interactions of psychological and physical factors acknowledging that

"neuroses," per se, are frequently the precipitators of many mental and gastrointestinal symptoms which may also be due to food allergy. In the last four decades, allergists have recognized that some allergic persons, with chronic or severe food allergy, may exhibit symptoms resulting from either localized allergic cerebral edema and vascular spasms, or exacerbated by emotional stress. No doubt as some allergic patients, due to their infirmities, become more aware of their bodily processes, become introspective, and concomitantly frustrated, and depressed. In turn, this hampers full utilization of their mental and physical powers (Rowe, 1972). Conversely, in other instances, it is the allergic agent itself which causes the depression and resulting inefficiency.

Tests Used by Allergists to Determine Presence of Allergens

No doubt there are professional psychologists who may not want to acknowledge the importance of allergies in psychological disturbances. Feeling "threatened" by such an impending acknowledgement, they may argue that allergists do not have valid means of ascertaining the presence of allergies, but this argument would appear a bit spurious, albeit the original scratch test used by allergists sometimes yielded false positives and negatives. Today, however, a competent allergist employs a thorough case history, interdermal tests, diet trials, nasal provocative tests, nasal smear, and

ophthalmic provocative test, blood count, chemical patch test, pulmonary function test, and X-ray and sputum cytology tests (among other assessment techniques) to determine the presence of allergens (Speer, 1963; Rowe, 1972; Informal Survey, 1973). There is current research on cytotoxic testing, an in vitro test, which checks the patients' blood for the reactions suspected allergens have on leucocytes, erythrocytes, and platelets (Black, 1956; Bryan, 1959; Bryan, 1971). This test, however, has some deficits, primarily related to the masking effect one allergen may have on another (Rowe, 1972; Informal Survey, 1973), but continued research should be expected to improve its validity and reliability. A more recently developed test thought to be more diagnostically reliable than the cytotoxic test (Rowe, 1972; Informal Survey, 1973) is the radioactive sorbant test (RAST), which is capable of detecting specific IgE antibodies and quantitating extremely small amounts.

Research Supporting Physiological Causation

In further support of the proposition favoring the physiological basis of allergic reaction are investigations on the sympatho-adrenaline system, suggesting that heightened activity of this system leads to attacks of bronchial asthma (Kolesor, 1966) and cyclic asthma attacks which can be monitored by the catecholamine metabolite excretions in urine samples (Masuda, 1966). In a study on the etiology of asthma

(Moiradkanyan, 1966) the autonomic endocrinal changes observed resulted from functional disturbances of the nervous system and for this reason evidence of "melancholy" and attacks of "nervous irritability" were thought to be established. A study on the emergence of sensibilization and allergic states in children and adolescents investigated the involvement of the sympathetico-adrenal system and cardiovascular reactions associated with allergic symptoms (Kalyuzhvaya, 1967). Other research supports the theory of allergically caused migraine. A study involving fifty eight migraine patients was conducted using clinical and paraclinical methods: electro-, rheo-, and echoelectrograms, skin tests and anti-allergic procedures (Fedorova, 1969). The results indicate that food allergy plays a major role in the causation of migraine. Still another study found that an allergic factor was clearly indicated in the development and delineation of the clinical picture of "hypertoxic schizophrenia and torpid catatonic stupor" (Ravkin, 1970).

Findings of Informal Survey

Somatically oriented allergen research of the variety presented in the preceding section makes it increasingly difficult to dismiss hypotheses pertaining to allergically caused "psychological" symptoms. As the review of psychological research indicated, psychology has spent appreciable effort in describing the "allergic personality," but has remained

relatively oblivious to medical findings on the subject. Psychologists have been concerned, for instance, with parental rejection, sibling hostility, guilt over masturbation, conditioning factors of traumatic events, and learned response patterns, but there has been little apparent awareness of the research on allergic reactions by allergists. While it is reasonable to assume that every "disturbed" patient is not allergic, one might also reasonably question the over-emphasis by psychologists of the psychogenic point of view. Certainly, there are many people manifesting chronic psychological symptoms who might be helped if more consideration was given to allergens and their probable role in the etiology of various apparent psychogenic disturbances. One might well wonder how many people, incarcerated in mental institutions, should be under non-psychologic care and custody; how many children, thought to be slow, or inattentive or even mentally retarded, might be attended more appropriately by treatment other than that which characterizes the armamentarium of the psychologist.

There would appear to be a demanding need for genuine communication and cooperation between psychologists and allergen specialists. The patients of both professional groups might benefit from a more symbiotic relationship than than which has prevailed to date. At present, communication between psychologists and allergen specialists is, it would appear, at the most minimal or nominal level. An informal

survey was taken among practicing psychologists and allergists in a large southwestern metropolitan area, in an effort to get some idea of the present level of communication and cooperation between psychologists and allergen specialists.

The survey revealed that only 16.6 percent of the responding psychologists were aware of current research on allergies, although 66.6 per cent of them were aware of the role allergies may play in the etiology of psychological disturbances. In response to a questionnaire regarding the presence of allergic symptoms in their patients, 75 per cent of the psychologists responded positively, but only 16 per cent contacted the patient's allergist in an effort to combine resources and information. An additional inconsistency related to the fact that while 41.6 percent of the responding psychologists believed that the psychological symptoms in their allergic patients were alleviated due to allergen treatment, 75 per cent had made no effort to contact the respective allergist regarding their patient's progress or allergen treatment program. Table I presents a complete review of the Psychologist Opinion Survey.

In view of the results of this brief and informal survey, it would appear that the contention that there is evidence for far more interaction between allergen specialists and psychologists has been given some support. Interestingly, it is the allergists who seem to evidence more interest in psychology than the converse. When questioned as to the presence of "psychological symptoms" in their patients,

TABLE I

PSYCHOLOGIST OPINION SURVEY
(46% RESPONDING)

Survey Question	% Yes	% No	% Other
1. Recognition of allergy role?	66.6	33.3	...
2. Awareness of current allergy research?	16.6	83.3	...
3. A. Allergy symptoms observed in psychological patients?	75.0	25.0	...
3. B. Further investigation made into source of allergy symptom?	50.0	41.6	8.4
4. Patient's allergist contacted?	16.6	75.0	8.4
5. Psychological symptoms alleviated with allergy treatment?	41.6	58.4	...
6. Need for joint research between psychologists and allergists?	66.6	33.3	...

90 per cent of the allergy specialists were aware of them and 90 per cent felt that the psychological symptomatology was alleviated when the allergic factors were controlled. In contrast to the number of psychologists who contacted allergists, 80 per cent of the responding allergists contacted psychologists in attempting to deal with a patient manifesting severe psychological symptoms in conjunction with his allergies. These informal results suggest that allergists seem to be more aware of the interactions of the somatic and the psychosomatic, while only 66.6 per cent of the responding psychologists believed there was a need for joint research by psychologists and allergists in the area of allergy based "psychological disturbances." Table II presents a complete review of the Allergist Opinion Survey.

Prospectus

It would appear that allergists have been aware of the "psychological" reactions an allergen can precipitate. In contrast, psychologists seem to be content to continue research in the area of "personality," instead of acknowledging and profiting from available medical information which has been occurring concerning the causes and emotional side effects of allergic reactions. The need for more "allergy awareness" does not only pertain to researchers in psychology, but also to clinicians. With more and more evidence supporting the potentially important role allergies exert in "psychic" disturbances this field can no longer be

TABLE II

ALLERGIST OPINION SURVEY
(53% RESPONDING)

Survey Question	Method	Per Cent		
1. Method of determining presence of allergy.	History	19.7		
	Diet trial	11.8		
	Scratch test	17.6		
	Interdermal	9.8		
	Phys. exam	7.8		
	Other	33.3		
		<u>% Yes</u>	<u>% No</u>	<u>% Other</u>
2.A. Awareness of research with cytotoxic testing.		100.0
2.B. Are results from cytotoxic testing valid in allergen identification?		30.0	70.0	...
3. Are psychological symptoms present in allergy patients?		90.0	...	10.0
		<u>Symptom</u>		
4. Prevalent "psychological symptoms."	Migraine	20.0		
	Drowsiness	8.0		
	Fatigue	28.0		
	Irratibility	20.0		
	Rapid mood fluctuation	12.0		
	Other	12.0		
		<u>Food</u>	<u>Inhalent</u>	<u>Both</u>
5. Type of allergen contact and % of associated psychological symptoms.		40.0	10.0	50.0

Table II (continued)

Survey Question	Method	Per Cent	
6. Methods of allergy treatment.	Avoidance	22.6	
	Imm. therapy	29.3	
	Elimination	25.6	
	Other	22.6	
	<u>% Yes</u>	<u>% No</u>	<u>% Other</u>
7. "Psychological symptoms" alleviated with allergy treatment.	90.0	...	10.0
8. Patient's psychologist contacted?	80.0	20.0	...
	<u>Allergic group</u>	<u>Per Cent</u>	
9. % of patients in specific allergic groups.	Asthma	24.3	
	Hay fever	10.8	
	Allergic rhin.	18.9	
	Vasomotor rhin.	8.1	
	Excema	8.1	
	Other	29.7	

"shuttled" aside by the psychologist; particularly the psychologist who does have a sincere regard for the welfare and eventual amelioration of his patients "emotional disturbances." It would seem that in many cases, the psychologist should be aware of the need to request his patient to submit to a thorough allergy history and other assessments and tests his allergen-specialist colleague might consider appropriate. The field of psychology, it would seem, should make an active effort to engage in meaningful cooperation with medical professionals specializing in allergic reactions, in an effort to better serve the needs of the individual patient and, indirectly, the general community.

APPENDIX A
Psychologist Opinion Survey

PSYCHOLOGIST OPINION SURVEY

1. Do you recognize the role allergies may play in the etiology of psychological disturbances?

2. Are you aware of current research in allergy, i.e., cytotoxic testing, which may have important implications for the field of psychology?

- 3.A. Do you note the presence of allergic symptoms in any patients you see? B. If so, do you seek to determine if allergies are, in fact, present?

4. When seeing a patient who is allergic, do you contact their allergist in an effort to pool information for the better management of the patient's disturbances?

5. Have you ever noted the alleviation of psychological symptoms in allergic patients due to their receiving treatment for their allergies?

6. Do you feel that there is a need for joint research by psychologists and allergists in the area of allergy based psychological disturbances?

If you care to, please add any additional comments which you feel may be of interest.

APPENDIX B

Opinion Survey of Allergy Treatment

OPINION SURVEY OF ALLERGY TREATMENT

1. What method do you use to determine the presence of allergies in your patients?

- 2.A. Are you aware of the research being done with cytotoxic testing? B. If so, do you feel that results from this method would be more valid in ascertaining the presence of physiologically caused allergies?

3. Do you note the presence of any psychological symptoms in patients who are manifesting allergic reactions?

4. What psychological symptoms seem to be most prevalent, i.e., drowsiness, migraine, fatigue, irritability, rapid fluctuations of mood, etc.?

5. Do these symptoms seem to be more prevalent in patients with inhalent allergies or food allergies?

6. What method of treatment do you use, i.e., desensitization, elimination diets, etc.?

7. When the allergic factors are controlled, do the psychological symptoms seem to be alleviated?

8. Do you ever seek the advise or assistance of a psychologist or psychiatrist in dealing with a patient who is showing severe psychological symptoms in conjunction with his allergies? If so, how often?

9. What allergic group makes up the majority of your practice, i.e., asthmatics, hay fever sufferers, vasomotor rhinitis, etc.?

If you care to, please add any additional comments which you feel may be of interest.

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