

The Journeywork Project

Examining the Healing Potential of Holotropic Breathwork

by *Oliver Williams*

Those who love truth must investigate many things.

Heraclitus

The following are excerpts from The Journeywork Project, a proposal prepared in 1999 for submission in May 2000 to the National Institutes of Health/Fetzer's Request for Applications (RFA) #AA-00-002, titled "Studying Spirituality and Alcohol."

One NIH reviewer of this proposal wrote:

"The Holotropic Breathwork approach of moving away from viewing the client as a willful "abuser" to a more compassionate attitude toward the client as a "seeker" of an altered state of consciousness is innovative in representing a non-western approach that reflects new therapeutic trends away from confrontation and towards empathy. Recent findings that the clients of empathetic therapists achieve better treatment response may argue for the potential efficacy of the empathetic approach.

Holotropic Breathwork is from a domain of spirituality typically neglected in the Western Culture research tradition. It evokes unfamiliar ideas such as the healing potential of "non-ordinary states of consciousness." Yet these ideas do have a long tradition in other major world religions such as Hinduism, Buddhism and Islam. The opportunity to examine Holotropic Breathwork as an adjunct to traditional addictions treatment is of significance to further understanding of a non-traditional form of spirituality and mystical experience that may provide experiences that facilitate sustained, positive treatment outcomes in persons recovering from alcohol abuse disorders."

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The most beautiful and most profound emotion we can experience is the sensation of the mystical. It is the sower of all true science. He to whom this emotion is a stranger, who can no longer wonder and stand in awe, is as good as dead... The Cosmic religious experience is the strongest and oldest mainspring of scientific research.

Albert Einstein

To believe without questioning or to dismiss without investigation is to comport oneself unscientifically.

Margaret Mead

Having started this research as a convinced materialist and atheist, I had to open myself to the fact that the spiritual dimension is a key factor in the human psyche and in the universal scheme of things.

Stanislav Grof

Specific Aims

The role of spiritual awakening and spiritual growth should be a cornerstone of clinical approaches in addiction rehabilitation.

David F. O'Connell, Ph.D.

This proposal views alcoholism as a multifaceted phenomenon that needs to be engaged by a multifaceted modality, and it is suggested here that Holotropic Breathwork is one such modality. The proposed study seeks to examine this hypothesis following established research protocols in authentic, real-life settings.

The healing potential of non-ordinary states of consciousness is largely unacknowledged and inadequately understood. Holotropic Breathwork reliably facilitates access to non-ordinary states of consciousness that may include profound insights, memories of long-forgotten psychic material, emotional abreaction, as well as spiritual experiences.

According to Stan Grof, co-developer of Holotropic Breathwork with his wife Christina, the homeopathic principle that guides this wholesome modality can facilitate the activation of inner healing mechanisms that are not usually accessible within traditional treatment methods. This activation of the innate healing potential of the psyche and the body initiates a transformative process guided by deep inner spiritual intelligence. Three studies conducted with individuals in recovery support this hypothesis.¹ The most recent, using Holotropic Breathwork and other transpersonal approaches within an accredited addiction recovery program in North Carolina, and assessed at one year post-treatment by an independent employee assistance/managed care firm, found an overall improvement among participants of 76 percent.

The aim of this proposed research is to determine if the promise of these preliminary findings can be borne out in studies following clinical protocols. If participants in recovery who represent ethnic, age, gender, and economic diversity find that their self-esteem, emotional expression, ability to relate to others, and behavioral functioning have improved as a result of their experiences in non-ordinary states of consciousness facilitated by Holotropic Breathwork, this cost-effective modality could be added as an adjunct to existing alcohol and addiction treatment programs.

At the present time, it is of primary importance to establish whether non-ordinary states of consciousness facilitated by Holotropic Breathwork, when offered authentically as an adjunct to ongoing recovery work, can have the beneficial effects upon participants that the studies to date indicate. This proposed study seeks to examine if this modality can reliably offer those in recovery some ease from the condition of alcoholism as well as if such changes have staying power and can lower the recidivism rate and "hold good" over time.

¹ Jefferys, G. B. 1999. "Transpersonal Psychotherapy with Chemically Dependent Clients." Unpublished monograph based on author's doctoral work; Metcalf, B. A. 1995. "Examining the Effects of Holotropic Breathwork in Recovery from Alcoholism and Drug Dependence." Unpublished manuscript, Greenwich University, Hilo, HI; Taylor, K. & Macy, S. 1993. "Holotropic Breathwork as an Adjunct to Substance Abuse Treatment in a Therapeutic Community." Presentation at AHBI Conference, CA.

Why Study Non-Ordinary States of Consciousness?

You will observe with concern how long a useful truth may be known and exist before it is generally received and practiced on.

Benjamin Franklin

The following passage is the opening paragraph of the "Background" section from the National Institutes of Health/Fetzer's RFA #AA-00-002 (p. 3):

Alcoholism and alcohol-related problems have an enormous impact on our society. Most adults can drink alcohol moderately and responsibly without complications. However, nearly 14 million Americans meet the medical criteria for a diagnosis of alcohol abuse or alcoholism. In addition, it is estimated that about 40 percent of Americans have direct family experience with this issue. Although a dollar figure cannot adequately reflect the social and human devastation caused by these illnesses, it is estimated that the economic and health care costs to society from alcoholism and alcohol abuse are nearly \$167 billion annually. Much of this cost is related to lost productivity, motor vehicle crashes, alcohol-related medical expenses and crime. Cirrhosis is the tenth leading cause of death in the United States and a significant portion of this incidence is related to alcohol dependence. Only a fraction of the total cost, around \$10.5 billion, is attributable to treating alcohol dependence and its medical consequences.

Given our signal lack of success in stemming the tide of alcoholic individuals produced by contemporary society, and in spite of the strenuous efforts that have been directed for centuries toward inducing individual and collective sobriety, it can be reasonably suggested that the existing knowledge of the mechanisms leading to alcoholism may be incomplete.

This proposal holds as a central hypothesis that environmental and genetic particularities are powerful and significant contributing factors to an individual's alcoholism, but they may not be causal. The variability of the biographical details of alcoholics would seem to bear witness to this; alcoholism is found in every culture where alcohol is available, among members of every racial and ethnic group, within every economic class and every age group, among the highly educated and the poorly educated, among all sexual orientations and in both genders.

Within these disparate groups and their subgroups, environmental and genetic factors exert tremendous influences upon the personalities of the members. These factors may contribute significantly to an individual's excessive use of alcohol and also act as powerful triggers to relapse. However, as other members of these same groups, often from the same biological family and experiencing essentially the same formative environmental influences, may not themselves succumb to alcoholism, it appears that these factors are not themselves causal.

Thus, it is suggested here that a potential cause of an individual's use of alcohol is the bona fide desire to seek transcendence. This is seen as an entirely wholesome and legitimate endeavor, the drive to experience non-ordinary states of consciousness being

considered by some authorities as fundamental to our well-being.² The lack of acknowledgement of this essential drive may be an impediment to our ability to understand the mechanisms of alcoholism and to offer more effective treatment.

Enlarging Our Frame of Reference

We, however, are not prisoners. No traps or snares are set about us, and there is nothing which should intimidate or worry us... Perhaps everything terrible is, in its deepest being, something helpless that wants help from us.

Rainer Maria Rilke, Briefe an einen jungen Dichter (Letters to a Young Poet)

From the standpoint of functioning and productive members of society, alcoholics are labeled variously as weak-willed, flawed, self-indulgent, escapist, and other pejorative designations. It is suggested here that by enlarging our own frame of reference to include, acknowledge, and legitimize the fundamentally healing spiritual dimension of the drive to use alcohol, we significantly alter the dynamics of recovery.

By changing our own attitude of superiority toward the “abuser” into one of compassion toward the “seeker,” we give a vital lift to the alcoholic’s chronically low sense of self-esteem. In this context, the use of alcohol to achieve transcendence is recognized as “an honest mistake,”³ a false step in one’s journey taken only for want of any viable alternative.

Further, we begin the process of authentically working with alcoholics by our willingness to acknowledge the essential legitimacy of their drive toward transcendence, albeit through the use of available, and addictive, substances. Thus, we are in a better relationship to guide them, by skillful means, in a non-addictive method of achieving transcendence by accessing non-ordinary states of consciousness. The experiences made available to them in this way through Holotropic Breathwork may truly satisfy their original seeking.

Legitimizing Experience Itself

When God is experienced, this event is as real as any sensory perception of one’s own self. In these instances, we have victory over death and pain. We are in touch with the ongoingness of the soul. We understand the divine plan and our role in it. We come closer to perfection, and we are worthy of being God’s co-creator.⁴

Dr. Valerie Hunt

The National Institutes of Health/Fetzer’s RFA #AA-00-002 states that programs addressing alcoholism that embrace spirituality as the fundamental element of their approach to sobriety are among the most successful. This embrace is considerably more than a theoretical understanding of spirituality; it is an

acknowledgement of the importance for the individual in recovery to experience, acknowledge, and own his or her spiritual nature.

In spite of the increasing importance that is attached to an individual’s lack of spirituality as an important factor in the development of alcoholism, emphasis has not been placed upon the possibility of actively encouraging the alcoholic, during recovery, to engage in work that might improve the possibility of experiencing spiritual aspects of himself or herself.

Closing the Gap

If you bring forth that which is within you, that which you bring forth will save you. If you do not bring forth that which is within you, that which you do not bring forth will destroy you.

Thomas in The Gnostic Gospels

Experiences in non-ordinary states of consciousness that are accessed through Holotropic Breathwork may represent the opportunity to close a significant gap in our understanding of alcoholism.

Whatever evidence we have as to the existence of spirituality is found less in specific belief systems held by the individual than in behavioral changes manifest in the individual; our spirituality is evidenced by what it effects in ourselves and in the world. Following experiences in non-ordinary states of consciousness accessed by Holotropic Breathwork, the beneficial behavioral changes described in all of the studies cited may be observed in participants.

Ceremonies, techniques, and disciplines that have been part of various practices of mankind’s oldest surviving spiritual traditions also perform the essential function of enabling participants to enter non-ordinary states of consciousness. Those that have come down to us, including plant medicines, trance-dancing, chanting, yoga, and meditation, were deliberately and specifically designed to offer the greatest possibility of transcending the limitations of this mortal coil and experiencing direct and vital communion with the Divine. Similarly, the operating principle of Holotropic Breathwork is to create the optimum conditions where experiences of one’s essential self, including those of a spiritual nature, can be most readily accessed.

Alcoholic Alienation

My soul was a burden, bruised and bleeding. It was tired of the man who carried it, but found no place to set it down to rest. Neither the charm of the countryside nor the sweet scents of a garden could soothe it. It found no peace in song or laughter, none in the company of friends at table or in the pleasures of love, none even in books or poetry. Where could my heart find refuge from itself? Where could I go, yet leave myself behind?

St. Augustine

2 Weil, A. 1972, 1986. *The Natural Mind*, p. 20. Boston: Houghton Mifflin.

3 Bateson, G. 1972. “The Cybernetics of ‘self’: A Theory of Alcoholism.” In *Steps to an Ecology of Mind*. New York: Ballantine.

4 Hunt, V. 1989. *Infinite Mind: Science of the Human Vibrations of Consciousness*. Malibu Publishing, Inc.

a condition of generalized boredom and total disenchantment. It was referred to as “a peculiar spiritual devastation” and as a “break-down of the relationship with the self, with others, and with the transcendent” by Dr. Thomas McGovern of Texas Tech University at the Studying Spirituality and Alcohol conference in 1999.

While the enhancement of the ability to reconnect with oneself is the most evident result of experiences in non-ordinary states of consciousness accessed by Holotropic Breathwork, it has also been found to have a profound and beneficial effect upon participants’ ability to relate to others. One individual said: “When you meet people in this work, you really meet them.” This enhanced proficiency is central to recovering individuals’ ability to maintain their equilibrium while navigating the tumultuous consequences of self-withdrawal from alcohol. The reclamation of their feeling of connection with themselves and the resulting involvement with an ongoing and supportive community is a seminal important component in the healing trajectory that individuals in recovery both seek and need going forward.

Preliminary Studies and Testimonials

The 1993 Taylor/Macy study used Holotropic Breathwork as an adjunct to an ongoing recovery program in a residential treatment center in California. Participants in the Taylor/Macy study refer to their increased ability to relate to other people:

“I felt better than I had felt in a long time. I felt real connected to the people in the house and I felt at ease with myself.”

“It takes something bad out of me and leaves something good. ... It is a time when I can be as real with other people as I am going to get these days. Other participants listen to what I have to say and I listen to them. There is a closeness there that you have to experience to know.”

“I love the bonding experience that I get with my sitter and other participants that do Breathwork. I learn a lot about myself and others at the same time.”

Others express their gratitude and relief at discharging emotions:

“Breathwork has given me the strongest feelings I have ever experienced. It makes me feel like my feelings may be something I don’t know about. I absolutely never thought that I could have any feeling, no matter what it was, have so much impact on me. I think that I have some hope that if being sober is feeling that strongly, I could enjoy it.”

“I started getting real frustrated and got a feeling of nausea. I told myself maybe I need to throw up, release something. Then I felt this real voltage of energy, and a black burst came out of me. I felt like I did a 90 degree angle turn and floated down about five feet to my bed. I felt totally relieved, relaxed, loved, great, calm, just in heaven. ... It was just what I needed.”

The 1995 Metcalf study conducted retrospective interviews with individuals in recovery who had participated in public Holotropic Breathwork groups. The Metcalf study abstract states:

Results indicate that Holotropic Breathwork is an effective therapeutic tool for treating alcohol and drug addiction.

The results of this particular sample also suggest that this modality could prove very beneficial in the area of relapse prevention. Each category examined showed marked improvement or a positive outcome. The highest improvements were in the areas of depression and anxiety; feelings and emotions; family, relationships and intimacy; stress reduction; self-esteem and spirituality.

The following testimonials from this study underscore the re-energizing potential of Holotropic Breathwork:

“I’m handling things today, walking through them successfully.”

“Holotropic Breathwork has helped me take action. I take care of myself better.”

“I now have close and intimate friends; unbelievable.”

“Breathwork reconnected me with my spirituality.”

The 1999 Jefferys study used Holotropic Breathwork and other transpersonal approaches in an outpatient addiction treatment program. Jefferys gives an overview of the transpersonal perspective, describes current treatment options, and documents the inclusion of Holotropic Breathwork and other transpersonal approaches within an addiction recovery program in North Carolina. The abstract states: “Results of the analyses of clients outcome data indicate that this model offers an effective treatment approach for this group of chemically dependent clients.”

The following are testimonials from Dr. Stanislav Kudrle’s Holotropic Breathwork group for people in recovery (Psychiatric Clinic FN, Plzeu, Czech Republic) (personal correspondence, 1999):

“Breathwork has helped me to understand my addiction. ... I started to discover myself and look for the relation to myself and others. I found the immense capacity to feel not only the hatred I was familiar with but also love, understanding and serenity. Thanks to Breathwork I started to awaken from blindness and impassivity and started to fight against my addiction.” ~Mirka

“Breathwork ... helped me find a freedom, release and feeling of happiness that I didn’t know before. I feel that nobody and nothing in the world can lead me back to addiction, which would finish off my life entirely.” ~Josef

“Breathwork opened the way ... [for me] to respect and love myself, others and ... the whole world. I feel that my black-and-white inner and outer world changed into a colorful and wonderful one, with all its problems and suffering of everyday life.” ~Svetlana

The following are testimonials from Oliver Williams’ Journeywork breathwork group in New York City:

“Breathwork has helped me to work out, to purge the internal obstacles masked by the drinking, in my case enormous negativity, self-hatred, intolerance, grandiosity and hypersensitivity.” ~Donna

“Breathwork has connected me to that loving, safe part inside and outside myself and made me finally feel that I was not alone. The perennial question ‘Is this all there is?’ was answered ‘No!’, which gives me hope and a renewed passion for life.” ~Linda

Many of these comments speak of the capability of Holotropic Breathwork to engender a profound sense of group belonging and connectedness among participants. Journeywork's experience is congruent with the experiences of groups conducted throughout the Holotropic Breathwork community during the past 18 years, namely, that a vital and supportive atmosphere readily establishes itself among participating members.

Research Designs and Methods

There is no proven treatment for addiction.

Lester Grinspoon, M.D., Associate Clinical Professor
of Psychiatry, Harvard Medical School

The research design and methods for the proposed study draw substantially upon the protocol written by John Freeman, M.D., entitled "The Relationship Between Non-Ordinary States of Consciousness and Outcome in Alcohol and Drug Abuse Treatment" (published in the May 1992 issue of *The Inner Door*), and from the design models of the three studies cited.

The goals of this proposed research are:

- To determine the effect of participation in Holotropic Breathwork sessions on the recidivism rate in an alcohol abuse treatment program
- To determine the relationship between spiritual experiences in non-ordinary states of consciousness and clinical improvement as reflected in objective measures of therapeutic outcome
- To produce a report documenting the indicators for further research and suggesting the most successful ways to integrate Holotropic Breathwork into treatment programs

The hypothesis is that there will be a statistically greater and/or more sustained improvement in the participants who have had peak experiences and/or emotionally cathartic experiences during Holotropic Breathwork.

The study volunteers will be randomized and then assigned to either the Holotropic Breathwork treatment group or to the control group. The only independent variable will be to offer 8 to 10 Holotropic Breathwork workshops plus support groups in addition to the usual course of treatment regimen for the experimental group, versus 8 to 10 comparable workshops and support groups in addition to the usual course of treatment for the control group.

Challenging the Norm

Perhaps the greatest gift one can give to another human being is not any thing, not ideas, not knowledge, but one's full attention.

Krishnamurti

In science, radical discoveries are commonly ignored when they challenge socially accepted truths. Aristarchus discovered that the earth revolved around the sun 1,400 years before Copernicus; Bruno knew that stars were actually suns with their own orbiting planets 400 years ago; and Newton's discoveries were not accepted until 75 years after his death. Alfred Wegener proposed over 85 years ago that the continents of earth were once a single

land mass he called "Pangea," a theory rejected by his contemporaries who believed that the earth was rigid. However, subsequent findings in marine geology, paleomagnetism, geophysics, and seismology all supported Wegener, and his theory is now part of the accepted theory of plate tectonics.

The proposed study seeks to examine, following clinical protocols, the findings of the three studies conducted within the Holotropic Breathwork community. These promising findings strongly suggest that, when experienced as an adjunct to an existing, ongoing recovery program, non-ordinary states of consciousness may have a beneficial effect upon participating individuals.

It is not within the purview of this proposed study to examine how or why Holotropic Breathwork may be effective. However, if the efficacy of this modality can be demonstrated by this study, further studies may be warranted, which could shed light upon these mechanisms with greater precision.

Related Independent Studies

The proposition that addiction and alcoholism are multifaceted phenomena is supported by four retrospective studies conducted at the Karolinska Institute in Stockholm, Sweden. The findings of the Karolinska studies are congruent with consistent reports of many individuals in non-ordinary states of consciousness facilitated by Holotropic Breathwork. Specifically, these reports emerge from perinatal experiences and suggest that the use of anesthetics, pain-killing medications, and other obstetric interventions during the birth process may significantly inform the individual in utero that stressful situations can be immediately relieved by the administration of an exogenous substance. The implications of such findings would bear directly upon the subsequent use of any and all substances (alcoholic, chemical, and/or narcotic) that the adult individual might subconsciously and somatically believe to be a viable way to transcend an intolerable reality.

The abstracts of these four studies follow.

Socio-Economic Versus Obstetric Risk Factors for Drug Addiction in Offspring

Nyberg K., Allebeck P., Eklund G., Jacobson B. 1992. *British Journal of Addiction*. 87 (12), 1669-76.

(Study conducted at Department of Clinical Alcohol and Drug Research, Karolinska Institute, Stockholm, Sweden)

Two possible risk factors for drug addiction were weighed against each other: (1) perinatal factors associated with obstetric medication at time of birth; and (2) factors associated with familial socio-economic conditions at time of birth. The subjects comprised 200 amphetamine addicts and 200 opiate addicts born in Stockholm 1945-1966. In a matched case control study, addicts were compared to their siblings with regard to possible obstetric risk factors by means of conditional logistic regression controlling for socio-economic level and civil status. Administration of opiates, barbiturates and nitrous oxide to mothers during labor was associated with drug addiction in offspring, hence confirming results from earlier studies. In a cohort study the risk associated with birth at a given hospital and familial socio-economic level was analyzed by means of log-linear analysis using 7100 controls from the general population. For amphetamine addicts, a low socio-economic level

at time of birth might be of importance for the infant subsequently becoming an addict. This could not be demonstrated for the opiate addicts. An uneven distribution of births among the hospitals, most pronounced for the amphetamine addicts, is in agreement with the hypothesis that obstetric practices may be risk factors for adult drug addiction.

Obstetric Pain Medication and Eventual Adult Amphetamine Addiction in Offspring

Jacobson B., Nyberg K., Eklund G., Bygdeman M., Rydberg U. 1988. *Acta Obstetric Gynecology Scandinavia*. 67 (8), 677–82.

(Study conducted at Department of Medical Engineering, Karolinska Institute, Stockholm, Sweden)

Our purpose was to investigate whether obstetric analgesia, particularly by nitrous oxide, constitutes a risk that the infant might develop amphetamine addiction in later life. Of 200 current amphetamine addicts born between 1945 and 1966 in Stockholm, proportionately more were born at hospitals where pain medication had been administered in large doses (p less than 0.05). A blind matched comparison was made between 73 addicts and 109 non-addicted siblings by logistic regression, in which nitrous oxide administration was tested in competition with 12 other natal variables as possible confounders. The risk for amphetamine drug addiction in offspring was found to increase with duration of intermittent administration of pure nitrous oxide, i.e. it was estimated to be 5.6 times greater (95% confidence intervals 1.6–16.9, $p = 0.005$) when nitrous oxide had been given for greater than or equal to 4.5 h vis-à-vis less than or equal to 0.25 h. Calculated risks are probably underestimates. Results can be explained as an effect of imprinting. It is concluded that local or regional anesthesia are preferable to general anesthesia which allows substantial amounts of drugs to cross the placenta.

Opiate Addiction in Adult Offspring through Possible Imprinting after Obstetric Treatment

Jacobson B., Nyberg K., Grönbladh L., Eklund G., Bygdeman M., Rydberg U. 1990. *British Medical Journal*. 301 (6760), 1067–70. (Study conducted at Karolinska Institute)

Objective: To test the hypothesis that opiate addiction in adults might stem partly from an imprinting process during birth when certain drugs are given to the mother.

Design: Retrospective study by logistic regression of opiate addicts with siblings as controls.

Subjects: 200 Opiate addicts born in Stockholm during 1945–66, comprising 41 identified during interviews of probands for an earlier study; 75 patients whose death from opiate addiction had been confirmed during 1978–88; and 84 accepted for the methadone programme. 262 Siblings (controls) born in Stockholm during the same period, 24 of whom were excluded for drug addiction or being brought up outside the family. Birth records were unavailable for eight, leaving 230 siblings and 139 corresponding probands.

Main Outcome Measures: Administration of opiates, barbiturates, and nitrous oxide (for greater than 1 h) to mothers of all subjects during labour within 10 hours before birth as a risk factor for adult opiate addiction.

Results: In subjects who had subsequently become addicts, a significant proportion of mothers had received opiates or barbiturates, or both, compared with unmatched siblings (25% v 16%, $\chi^2 = 5.83$, $df = 1$, $p = 0.02$), and these mothers had received nitrous oxide for longer and more often. After controlling for hospital of birth, order of birth, duration of labour, presentation other than vertex, surgical intervention, asphyxia, meconium stained amniotic fluid, and birth weight, the relative risk for offspring subsequently becoming an adult opiate addict increased with the number of administrations of any of the three drugs. When the addicts were matched with their own siblings the estimated relative risk was 4.7 (95% confidence interval 1.8 to 12.4, p for trend = 0.002) for three administrations compared with when no drug was given.

Conclusions: The results are compatible with the imprinting hypothesis. Therefore, for obstetric pain relief, methods are preferable that do not permit substantial passage of drugs through the placenta.

Obstetric Medication Versus Residential Area as Perinatal Risk Factors for Subsequent Adult Drug Addiction in Offspring

Nyberg K., Allebeck P., Eklund G., Jacobson B. 1993. *Paediatric Perinatal Epidemiology*. 7 (1), 23–32.

(Study conducted at Department of Clinical Alcohol and Drug Research, Karolinska Institute, Stockholm, Sweden)

In an attempt to explain pronounced uneven distributions of births of subsequent amphetamine and opiate addicts at seven hospitals in Stockholm, two possible mechanisms for adult drug addiction were weighed against each other: (1) risk factors associated with the obstetric care at the hospitals of birth of the addicts and (2) risk factors associated with the phenomenon of “contagious” transmission of drug addiction in certain residential areas during adolescence. The subjects comprised 200 amphetamine addicts and 200 opiate addicts born between 1945 and 1966. By log-linear analysis the relative risk for future addiction was determined for eight residential areas as well as for the seven hospitals and four periods of birth. For the opiate addicts only one weak association was found for the residential area, which could not explain fully a clustering of births at any particular hospital. For the amphetamine addicts, hospital of birth was found to be an important risk factor even after controlling for residential area. Hence, the variable residential area has not been able to explain the uneven distribution of births of drug abusers among the studied hospitals. ▲

Oliver Williams, born in England in 1945, came to the United States in 1972. An illustrator and map-maker, he works for the New York Times, Newsweek, the New Yorker, and others. GTT certified in 1996, Oliver offers Holotropic Breathwork in New York City, the northeast, England, and Germany. Elected to the AHBI Board to form the Research Committee, he is dedicated to seeing Holotropic Breathwork acknowledged as a healing system of utility and value. Oliver can be reached at research@ahbi.org.

