BRAIN PLEASURE SYSTEMS INHIBIT BRAIN VIOLENCE SYSTEMS

James W. Prescott, Ph.D.

13 February 2011

Hi Jim,

Just want to make sure you saw this study by http://linlab.med.nyu.edu/members.html Dayu Lin at New York University that corroborates your own studies and the work you have been doing for over four decades. Here is the Nature summary of the study:

http://www.nature.com/nature/journal/v470/n7333/full/nature09736.html

Excerpt: Immediate early gene analysis and single unit recordings from VMHvl during social interactions reveal overlapping but distinct neuronal subpopulations involved in fighting and mating. Neurons activated during attack are inhibited during mating, suggesting a potential neural substrate for competition between these opponent social behaviours.

"The mating circuit acts like a gate on the aggression circuit and actively suppresses nearby fighting neurons when there is a potential mate around," says Lin.

Peace through pleasure
Susan

Susan M. Block, Ph.D.
http://drsusankblockinstitute.com

Thanks Susan for the reference. The reciprocal inhibitory relationship between Pain and Pleasure and Peace and Violence have been known for a long time. It is great to know that “mating circuits” actively suppress “nearby fighting neurons” in the mouse brain.

The scientific history of this relationship goes back to the 1950s with the studies of Robert G. Heath, M.D., Sc.D. at Columbia University and continued as Chairman, Department of Psychiatry and Neurology, Tulane University Medical School. His edited 1964 textbook The Role of Pleasure In Behavior is a classic in the field.

Continue HERE.

SEPTAL STIMULATION AND ORGASM

Heath’s 1972 article Pleasure and Brain Activity in Man. Deep and Surface Electroencephalograms During Orgasm: Deep and Surface Electroencephalograms During Orgasm in The Journal of Nervous and Mental Disease provides clear evidence for these relationships in seriously ill psychiatric
patients where all previous psychiatric treatments had failed.


He states:

Deep and surface electroencephalograms were recorded during sexual arousal culminating in orgasm in 2 patients, 1 undergoing treatment for severe mental illness and the other for intractable epilepsy. Such recordings were obtained on two occasions in 1 patient and on 12 occasions in the other. Recording changes concomitant with the behavioral response were significant and consistent; most striking was the appearance of spike and slow-wave with superimposed fast activity in electroencephalograms from the septal region during sexual orgasm. In one patient distinct, but less dramatic, changes also occurred in the amygdalae, thalamic nuclei, and deep cerebellar nuclei. The other brain sites in which changes occurred are anatomically connected to the septal region and have previously been shown to be important sites in the pathways for emotional expression.

These data substantiate previously reported data, gathered through other procedures, of a consistent correlation between activity in the septal region and the pleasure response.

which delivered a 1-second stimulus. The patient explored the effects achieved by pushing each button, but it was the septal region that he stimulated repeatedly. He was permitted to wear the device for 3 hours at a time: on one occasion he stimulated his septal region 1,200 times, on another occasion 1,500 times, and on a third occasion 900 times. He protested each time the unit was taken from him, pleading to self-stimulate just a few more times. The buttons attached to other brain sites were
never used more than a few times during each 3-hour period.

(p.6).

and

The Tulane group previously reported that septal stimulation induced a sexual motive state, whereas stimulation of other pleasure sites (the vicinity of the medial forebrain bundle and interpeduncular nuclei), while creating pleasant feelings, failed to induce the sexual motive state (5, 6). The anatomical connections between the septal region and other nuclear sites within the pathways of emotional expression, together with demonstration of the functional inter-relationship among sites within these pathways, has been described.⁷ These studies indicated that principal sites involved in emotional expression were the septal region (defined by the author to include the nucleus acumbens septi and the nucleus of the diagonal band of Brocha (4), the hippocampi, the amygdalae, the orbital cortex, and specific sensory relay nuclei (posterior
PALEOCEREBELLAR DECORTICATATION

Further evidence of brain mechanisms in the regulation of emotional behavior has been provided by Berman, Berman and Prescott (1974) that paleocerebellar decortication but not neocerebellar decortication in pathological violent adult mother deprived monkeys cold transform this violent animal into a peaceful, inquisitive, exploratory animal that could accept hand feeding, petting and climbing on the back of the attendant, behaviors not possible before surgery. http://www.violence.de/berman/article.html

CEREBELLAR PACEMAKER


"... The patients who have responded best to the treatment are those with depression, those with behavioral pathology consequent to epilepsy, and those with psychotic behavior consequent to structural brain damage... Twenty-one percent of the patient group displayed structural evidence of cerebellar pathology that was not detected before operation, a finding which suggests that cerebellar damage may induce psychotic behavior.” (P.243). And

“Those who are ill because of a preponderance of profound adversive emotion (depression, rage, violent behavior) benefit significantly. The stimulation also works well with the clinical diagnostic entity of depression, including anhedonia.” (p.255).And

“These findings suggest that structural anomaly of the cerebellar vermis is a cause of psychotic behavior.” (P.252).
SEPTAL SPIKE DETECTION AND VIOLENT BEHAVIOR.

Saltzberg (1977ab), working in Dr. Heath’s Department developed a computer signal processing analysis program that could identify sub-cortical septal spiking events from normal surface scalp EEG recordings, thus identifying the pathological dangerous violent offender from the “normal” violent offender. This was made possible by a two channel solid-state computer (Time Data 100) acquired under an NICHD contract. This made possible computations not possible utilizing main-frame computers that were cost prohibitive. These efforts can be found at:

http://www.violence.de/saltzberg/acemb/article.html

The National Institute of Child Health and Human Development blocked a collaborative research effort with the Federal Bureau of Prisons to determine the effectiveness of non-invasive sub-cortical spike detection to identify the “dangerous” violent offender. See attached documents (13 November 1978).

EARLY SOMATOSENSORY DEPRIVATION AND ABNORMAL BRAIN DEVELOPMENT

Prescott (1970) summarized the neuroscientific data in an article titled _Early Somatosensory Deprivation as an Ontogenetic Process in the Abnormal Development of the Brain and Behavior_ that supported the role of vestibular-cerebellar processes in the many and varied emotional-behavioral pathologies associated with failed physical affectional bonding in the maternal-infant/child relationship.

http://www.violence.de/prescott/mp/article.html  and concluded:

“Cross-cultural anthropological studies could profitably be directed at cultures with identifiable extremes of sensory input (positive and negative) during early development and those with extreme behavioral patterns (peaceful-tranquil versus violent-aggressive) to determine the nature of any interrelationships that may exist among these variables”. (p.367).

CROSS-CULTURAL STUDIES.

Prescott (1975) published his first cross-cultural studies on tribal cultures that confirmed the relationships of affectional bonding in the maternal-infant/child relationship and the peaceful or violent nature of the adult culture in _Body Pleasure and The Origins of Violence_ in _The Futurist_ and reprinted in _The Bulletin of The Atomic Scientists_.

http://www.violence.de/prescott/bulletin/article.html

Numerous subsequent cross cultural studies extended the Pleasure Principle to Sexual Relationships and found that sexually repressive, puritanical cultures were violent
(patrilineal theistic cultures); and sexually permissive cultures were peaceful and non-violent (matrilineal/non-theistic cultures). (Prescott, 1977, 1980, 1990, to name a few).

The 49 tribal cross-cultural studies based upon Textor (1967) ultimately was able to document that the Peaceful or Violent nature of the adult culture could be predicted with 100% accuracy by two measures of affectional bonding in the culture: 1) maternal-infant/child affectional bonding; and b) youth sexual affectional bonding. Gambill (1985) captured these relationships in an essay titled: Can More Touching Lead to Less Violence in Our Society? It probably can if Developmental Neuropsychologist James W. Prescott's Pleasure/Violence Reciprocity Theory Is Correct. The Human Touch Jan/Feb. http://www.violence.de/gambil/ht/1985article.html

The 400 culture sample of Textor (1967) provided a selected sample of cultures for analysis, as multiple criteria for classifying cultures rapidly decreased the number of cultures that had data available on all criteria, e.g. child rearing practices, sexual practices, religious beliefs/customs and social structure. Not all cultures are rated on all variables. The need is critical to code all 400 cultures on the relevant variables, an objective that was not a priority of the NICHD.

The possible lesson for modern countries is clear. We seem to be suffering from breakdowns in affectional bonds — reflected in everything from rates of divorce to sexual crimes, alcoholism, and drug abuse.

Culture is that handmaiden of our neurobiology, and without a proper environment for physical affection, a peaceful, harmonious society may (will) not be possible. Psychology Today December 1979 http://www.violence.de/prescott/pt/article.html


TRAVEL ORDER

Appropriation No. 64-I-63

To: James W. Prescott, Ph.D., Health Scientist Admin., NIH, NIMH

Travel to: Bethesda, Maryland, to Springfield, Missouri and return.

The Department of Justice, Bureau of Prisons has invited Dr. Prescott to give a seminar on "Developmental Origins of Violent Behavior" as part of their North-Central Regional Psychology Seminars. (Letter of invitation attached). The Department of Justice will reimburse the NIH account for travel and per diem expenses for this trip.

Address: 13500 Quarry Hill Road
Barrstown, Md. 20760

Transportation of [REJECTED]

Blanket GTR Est. $210.00

Travel of privately owned auto authorized on mileage basis rate specified below for:
- Employee
- Dependent
- Employee
- Dependent
- Auto Rental (the following is to apply):
- Per mile over 60 miles
- Per mile over 60 miles
- Other (specify)

EXPENSES TO BE REIMBURSED COMPLIMENTARY OF TRAVELER

EXTRA COSTS/ADDITIONS
- Lodging
- Meals
- Other (specify)

DENY REIMBURSEMENT FOR TRAVELER

TRAVELER

James W. Prescott, Ph.D., Health Scientist Admin., NIH, NIMH

Approvers:

Traveller

8

[Signature]

TRAVELER
November 21, 1978

Dear Dr. Prescott:

I am writing to you again thanking you for your most interesting presentation last week at the U.S. Medical Center for Federal Prisoners in Springfield. Dr. Levinson, our Deputy Assistant Director of the Community and Correctional Programs Division, was also impressed with your work and has suggested to the Director that you make a presentation here in the Central Office.

Dr. Warden, Chief at Springfield, MCF, was very excited about collaborating with you on future research. I am sure you will be hearing from him soon. The other regional psychologists are most anxious to hear and read more of your work.

I have not yet resolved my distress about your agency's lack of support for sharing your work with another federal agency. Your positive attitude of allegiance to your agency is the only variable that mitigates my reactions to this recent incident. I can only admire your dedication.

Please let me know if there is any way I can be of assistance to you. I look forward to our meeting again in the near future.

Sincerely,

Robert J. Novitzky, Ph.D.
Administrator, Psychology Services
November 29, 1978

Dr. James Prescott
National Institute of Child Health
and Human Development
Landau Building, Room C719
7910 Woodmont
Bethesda, Maryland 20014

Dear Dr. Prescott:

Recently I heard from several members of my staff concerning the presentation you made at the North Central Regional Psychologists' meeting at which you discussed some of your studies relating to the possible developmental origins of violent behavior.

I would like to invite you to make a similar presentation to the Central Office staff of the Federal Bureau of Prisons. From time to time we have scheduled seminars of this nature at our Wednesday noon/luncheon meeting. If it fits with your schedule, we would appreciate your making an hour to an hour-and-a-half presentation on Wednesday, January 10, 1979. These meetings are held in the Bureau's Fifth Floor Conference Room located in the 1DNC Building at First and D St. N.W., Washington, D.C.

If you have any further questions concerning these arrangements, please contact Dr. Robert B. Lovinison, Telephone No. 724-3042. I look forward to hearing from you concerning your acceptance of this invitation and to what I am sure will be a very interesting presentation.

Sincerely,

[Signature]

NORVAN A. CARLSON
Director
MEMORANDUM

TO: The Record

FROM: Health Scientist Administrator, HLB, CRC, NICHD

DATE: December 27, 1978

SUBJECT: Bureau of Prison Seminar

On December 27, 1978, Dr. Robert B. Levinson, Administrator, Inmate Program Services, Bureau of Prisons, U.S. Department of Justice, telephoned me to inform me that my presentation scheduled for Mr. Carlson, Director, Bureau of Prisons and his staff on January 10, 1978 has been postponed and that a rescheduling date was unknown.

In discussing this postponement, I suggested that it may well be a cancellation due to the lack of NICHD support for this activity and that it was understandable why Mr. Carlson postponed this seminar to avoid becoming intermeshed with an NICHD internal administrative problem.

I thanked Dr. Levinson for the efforts he made to provide me with an opportunity to share basic research findings from NICHD supported research programs with the Bureau of Prisons. I apologized for any embarrassment that this may have caused him and Mr. Carlson and regretted that the communication of potentially useful scientific information to the mission of the Bureau of Prisons was being obstructed by the administrative actions of Dr. Wreckner, Director, NICHD.

I informed Dr. Levinson that I would keep him apprised of the response to my memorandum to Secretary Califano, HHS, which requested corrective action on the above and that, hopefully, the seminar/briefing could be reinstated in the near future.

James W. Prescott, Ph.D.