

tionate form and avoid those which are derogatory or which deal with the obscene or with personality defects, the investigators found.

More than a third of the boys had nicknames referring to personality defects, nearly a third had nicknames referring to physical defects, and the rest either had no nicknames or had one falling into one of the following cate-

gories; endearment or affectionate contraction; sweetheart's name; nationality or place of birth; name of animal; distortion of name, and miscellaneous.

Of the girls, nearly a third belonged in the "affectionate" classification, about the same number in the "physical defects" category and 15 out of a hundred in the "distortion of name" category.

*Science News Letter, March 2, 1935*

# PSYCHIATRY

## Heredity Shares Blame For Ecstasy-Despair Insanity

### Richer Emotions of Women Also Linked To Inheritance by Study of 180 Twins

**T**HE KIND of insanity that swings a person from exalted ecstasy to despondency and despair is the "most hereditary" of all the common types of mental ailments.

Examination of 90 pairs of twins by scientists at the Los Angeles Diagnostic Clinic in Los Angeles, revealed this information about what is known to physicians as manic-depressive insanity.

The richer emotional life of women may be due to the same inheritance, which, combined with other hereditary factors and life experiences, leads to the manic-depressive state, the scientists theorized.

The hereditary make-up of the individual must share the blame for his mental breakdown, it was found. What happens to him during life is also important. Two heredity elements, called "cyclothymic" and "activating" by the scientists, are concerned. Both of these are widely distributed among human beings. Any person may have his share of either one of them. But neither one, acting alone, can produce the disease, nor can the results of experience when the hereditary factors are not present.

It is only when both hereditary factors are present that an experience such as a severe illness or a mental strain may bring it on.

One or both members of each of the 90 pairs of twins studied suffered from manic-depressive insanity. Study of the frequency with which the other members were also affected led to the new theory of the cause of this mental illness presented by Dr. Aaron J. Rosanoff, Leva M. Handy, and Isabel Rosanoff Plesset.

(*American Journal of Psychiatry*, Jan.)

Twenty-three pairs of twins studied were identical twins, the type that are so much alike that they are commonly mistaken for each other and have their origin in a single egg cell with identical heredity. Of these, both twins were affected in 16 instances, and only one of each pair in but 7 cases.

If one of such identical twins develops manic-depressive insanity, the other is more likely than not to develop the same kind of mental disease, it was found. But it was never observed that one member of identical twins would develop manic-depressive insanity and the other feeble-mindedness, epilepsy, schizophrenia, or some other form of mental ailment. Always if both twins were mentally ill and one was manic-depressive, the other would be manic-depressive, too.

A different picture was shown by the other 67 pairs of twins. These were not identical. Some were not even of the same sex. All were different in appear-

ance, temperament, and hereditary background. Of these, both twins were affected in only 11 instances, while in 56 instances only one twin of each pair was manic-depressive. In one case, one of the twins was manic-depressive while the other was an imbecile.

Women are more susceptible to manic-depressive insanity than are men. This fact may be one reason why so many of the unlike twins had only one of each pair affected; many unlike twins are brother-sister combinations.

First among the causes of manic-depressive insanity is what the scientists call a "cyclothymic" factor, which is widely distributed by heredity among humans and has to do with the emotions of mankind. It does not cause mental disease unless it is combined with another hereditary factor called the "activating" factor.

The activating factor is present in the X-chromosomes which determine sex, and is therefore more likely to appear in women than in men, because women have two of these chromosomes. It may be this factor, the investigators say, that accounts for the somewhat richer emotional life of women.

Like the cyclothymic factor, the activating factor alone is not capable of producing mental disease.

Finally, some unfortunate experience is needed to "set off" the hereditary factors and produce the disease. This "last straw" that breaks down the patient may be physical, such as an illness, a birth injury, or even a blow on the head. But in the majority of cases, it is a psychological experience such as loss of employment, financial loss, disappointment in love, or a death in the family.

The unfortunate combination of two hereditary factors plus one or more environmental conditions, produces the manic-depressive insanity, the investigator showed.

*Science News Letter, March 2, 1935*

## SUBSCRIPTION ORDER COUPON

To Science News Letter, 2101 Constitution Avenue, Washington, D. C.

Please ☐ start ☐ renew my subscription to SCIENCE NEWS LETTER for ☐ 2 years, \$7 ☐ 1 year, \$5

☐ Enclosed find check. ☐ Please send bill

Name.....

Street Address.....

City and State.....