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# HOMOSEXUALITY :

# RESULTS OF A SURVEY

# AS RELATED TO

# VARIOUS THEORIES

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A Thesis

Submitted to

the Department of Psychology,

University of the Witwatersrand,

for the Degree of

Doctor of Philosophy.

**********

By

Renée Liddicoat.

October 1956.

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Thesis

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# PART I. REVIEW OF LITERATURE.

## I. INTRODUCTION.

### Definitions of Homosexuality.

Homosexuality has been variously defined as a diffused condition, firmly imprinted on the whole psychic state[1]; as an inadequate sexual adjustment, often a maldevelopment[2]; as a personality factor[3]; as an attitude of mind[4]; as a syndrome, a mode of behaviour[5]; and as a defence mechanism, not a drive[6]. Different authors have adopted different terms, such as "urning" (Ulrichs, 1862); contrary sex feeling (Westphal, 1869: used by Krafft-Ebing and Moll); homosexuality (Benkert, 1869: used by Hirschfeld); sexual inversion (Tamassis, 1878; Charcot and Magnan in France and Italy, 1882, and J. A. Symonds in England, 1883); congenital homosexuality, pseudo-homosexuality and bisexuality (Iwan Bloch); homoerotism (Ferenczi), emphasising the psychical aspects of the impulse in contrast to the biological term 'sexuality'[7]; Havelock Ellis prefers the term sexual inversion, meaning "sexual instinct turned by inborn constitutional abnormality toward persons of the same sex", this being a narrower term than homosexuality, which includes all sexual attractions between persons of the same sex[8]. The homosexual is described by Allen[9] as "neither a fiend nor a genius, but merely a sick man whose illness produces peculiar social problems."

The majority of writers qualify their definitions or descriptions: Krafft-Ebing points out that "perversion of the sexual instinct ... is not to be confounded with perversity in the sexual act; since the latter may be induced by conditions other than psychopathological... In order to differentiate between disease (perversion) and vice (perversity), one must investigate the whole personality of the individual and the original motive leading to the

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[1]Havelock Ellis, Studies in the Psychology of Sex, Vol. II, Sexual Inversion. Philadelphia, F. A. Davis, Co., 3rd Ed., 1931, p. 327.

[2]L. T. Shaffer, The Psychology of Adjustment, N.Y., Houghton Mifflin Co., 1936, p. 379.

[3]W. Norwood East, The Modern Psychiatric Approach to Crime, J. Ment. Science, 65, Jul. 1939, p. 665.

[4]D. Stanley-Jones, Sexual Inversion : an Ethical Study, The Lancet, 252:1, 1947, pp. 366-369.

[5]Morris W. Brody, An Analysis of the Psychosexual Development of a Female - with Special Reference to Homosexuality, Psychoanal. Rev., 30:1, Jan. 1943, p. 57.

[6]Edmund Bergler, Neurotic Counterfeit Sex, N.Y., Grune and Stratton, 1951, p. 199.

[7]A. A. Brill, Homoerotism and Paranoia, Am. J. Psychiatry, 13 (old series, 90), 5, Mar., 1934, p. 958.

[8]Ellis, Ibid, p. 1.

[9]Clifford Allen, The Sexual Perversions and Abnormalities, London, Oxford Univ. Press, Medical Publications, 2nd Ed., 1949, p. 140.

perverse act."[1] Kahn emphasises that the homosexual desires or prefers his own sex for emotional, intellectual and physical satisfaction.[2] Greenspan and Campbell state that the homosexual possesses characteristic psychic and physical traits of the opposite sex.[3] Stanley-Jones warns that "Homosexuality does not necessarily imply any overt manifestation of physical sex", and adds, "The word itself bears, or should bear, no stigma of shame."[4] Laycock comments on the fact that the homosexual and the sex pervert are frequently identified in the mind of the public, and says, "The term 'sex pervert' should be reserved for those whose sex-life is anti-social, that is, carried out in a way which is considered to be injurious to other people, or a violation of their rights, and which is considered to be against the rights of society as a whole... It should be remembered that homosexuals, like heterosexuals, may be social or anti-social in their behaviour."[5] Gordon Westwood makes it clear that neither infantile and early pubertal homosexuality, which can be regarded as part of the normal development of a child, nor pseudo-homosexuality and infanto-homosexuality, should be included under the heading of homosexuality.[6] Kinsey et al remind one that "the classification of sexual behaviour as masturbatory, heterosexual, or homosexual is based upon the nature of the stimulus which initiates the behaviour... and the terms are of value only because they describe the source of the sexual stimulation, and ... should not be taken as descriptions of the individuals who respond to the various stimuli."[7]

Degrees of Homosexuality.

However homosexuality may be defined or described, it is generally agreed that, far from being an all-embracing term, it varies in degree in different individuals. Krafft-Ebing pointed this out in his "Psychopathia Sexualis" in 1899.[8] Freud says that, "in addition to their manifest heterosexuality, a very considerable measure of latent or unconscious homosexuality

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[1] R. von Krafft-Ebing, Psychopathia Sexualis, London, Rebman Ltd., 1899, p. 75.

[2] Samuel Kahn, Mentality and Homosexuality, Boston, Meador Publishing Co., 1937, p. 15.

[3] Herbert Greenspan and John D. Campbell, The Homosexual as a Personality Type, Am. J. of Psychiatry, 101, Mar. 1945, p. 682.

[4] Stanley-Jones , Op. Cit., pp. 366 - 369.

[5] S. R. Laycock, Homosexuality - A Mental Hygiene Problem, Canadian Med. Assocn. J., 63:3, Sept. 1950, p. 245.

[6] Gordon Westwood, Society and the Homosexual, London, Victor Gollancz Ltd., 1952, p. 23.

[7] Kinsey, Pomeroy, Martin and Gebhard, Sexual Behaviour in the Human Female, Philadelphia and London, W. B. Saunders, Co., 1953, p. 446.

[8] Krafft-Ebing, Ibid, p. 272.

can be detected in all normal people"[1] and that inverts behave in many ways quite differently, from the absolutely inverted to the occasionally inverted, all transitions being abundantly encountered.[2] Havelock Ellis attempts no classification into homosexual, bisexual or heterosexual, but says, "The real distinction would seem ... to be between a homosexual impulse so strong that it subsists even in the presence of the heterosexual object, and a homosexual impulse so weak that it is eclipsed by the presence of the heterosexual object."[3] Occasional sex acts with a person of the same sex do not necessarily signify overt homosexuality, according to Brill; but under certain conditions homosexuality may become more or less pathological.[4] Kinsey states, "We fail to find any basis for recognising discrete types of homosexual behaviour. An analysis on any basis will show every type of inter-gradation between the extreme cases in our series."[5] He follows this up with his heterosexual-homosexual rating scales[6] and points out further that moral considerations or fear of social difficulties might deter a person who is primarily or even exclusively homosexual in his psychic responses, from any overt homosexual relations.[7] The pattern of sexual behaviour in any individual may change during the course of his life and Kinsey places the number of white males in the United States who are exclusively homosexual throughout their lives as 4%[8], and the number of unmarried females between the ages of 20 and 35 as from 1% to 3%.[9] These figures are in agreement with Landis and Bolles[10] who do not quote statistics but who do say that the number of individuals who are exclusively homosexual for all or most of their lives is "very small", and that this group includes individuals whose behaviour, dress and attitude are those of the invert, a male who acts or dresses like a woman, or a female who acts or dresses like a man. Carney Landis et al, in 1940, discussed the varieties of homoerotically inclined women and classed them as temporary, consistent and sporadic[11]. This idea that homosexuality appears to be a matter

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[1] Sigmund Freud, The Psychogenesis of a Case of Female Homosexuality, Internat. J. of Psychoanal., 1:2, Jan. 1920, p. 148.

[2] A. A. Brill, Editor and Translator, The Basic Writings of Sigmund Freud, N.Y., Modern Library, 1938, p. 555.

[3] Ellis, Op. Cit., p. 87. [4] A. A. Brill, 1934, Op. Cit., p. 958.

[5] Alfred C. Kinsey, Homosexuality: Criteria for a Hormonal Explanation of the Homosexual, J. Clin. Endocrin., 1:5, May 1941, p. 427.

[6] Kinsey, Pomeroy and Martin, Sexual Behaviour in the Human Male, Philadelphia, W. B. Saunders, Co., 1948, p. 638; and Kinsey et al, 1953, Op. Cit., p. 470.

[7, 8] Kinsey et al, 1948, Ibid, pp. 633, 651.

[9] Kinsey et al, 1953, Op. Cit., p. 474.

[10] Landis and Bolles, Textbook of Abnormal Psychology, N.Y., The MacMillan Co., 1947, p. 249.

[11] Carney Landis et al, Sex in Development, N.Y., Paul B. Hoeber, 1940, p. 229.

of degree is supported by Laycock[1], who suggests that a combination of factors results in a greater or less degree of homosexuality in different individuals, the only true test of degree being "the degree to which the psychic and/or overt sex interests and activities are directed towards the opposite sex." Sherwin comments on the "amazing number of married men who have quietly and secretly indulged in some form of homosexual relationship during the course of their marriage"[2], and Cory includes a number of married men under the heading homosexual, because their primary desires are toward gratification with other males, although they are capable of sexual relations with women.[3]

Between the two extremes of exclusively homosexual and exclusively heterosexual behaviour, there remain a considerable number of individuals, both male and female, who include both types of activity in their sexual responses. Homosexuality and normal heterosexuality are not therefore necessarily exclusive.

Historical Background.

Published scientific literature on the subject of homosexuality is of comparatively recent date, having begun in Germany about a hundred years ago. Baudelaire was tried for "Fleurs de Mal" in 1858, a year before the publication of Darwin's "Origin of the Species". Krafft-Ebing's long domination, continuing Tissot's rôle, dates from 1882 with "Psychopathia Sexualis". Havelock Ellis was tried for "Problems of Modern Ethics" in 1891. Before he began his study on homosexuality in 1894, no English case had been recorded except from a prison or an asylum. His "Sexual Inversion" was published in the German edition in 1896. Wilde was arrested in 1895, the year in which Carpenter published "Homogenic Love". Freud began his studies of hysteria and sex in 1890, publishing the first formulation of his theory in 1893, with Breuer.[4] Hirschfeld was also among the writers during the latter half of the nineteenth century. The subject was studied further by Dickinson, a physician and gynaecologist, by the anthropologists Malinowski and Mead, by sociologists, psychoanalysts and experts in many other fields, including law and medicine.

Although the study of homosexuality is so recent, Goethe wrote that homosexuality is as old as humanity itself and can therefore be considered natural; Ford and Beach add, "And human history lends his statement the ring of

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[1] S. R. Laycock, Op. Cit., pp. 246, 248, 247.

[2] Robert Veit Sherwin, Some Legal Aspects of Homosexuality, Internat. J. of Sexology, 4:1, Aug. 1950, pp. 22 - 25.

[3] Donald Webster Cory, The Homosexual in America, N.Y., Greenberg, 1951, p. 220.

[4] Robert Latou Dickinson and Lura Beam, The Single Woman, London, Williams and Norgate Ltd., 1934, p. 14.

truth."[1] Kinsey et al state that "the homosexual has been a significant part of human sexual activity ever since the dawn of history, primarily because it is an expression of capacities that are basic in the human animal."[2] They trace the condemnation of homosexual activity, from the penalties inflicted by the Hittite, Chaldean and early Jewish codes for homosexual activities between specific persons or in particular circumstances to the more general condemnation of all homosexual relationships which originated in Jewish history in about the seventh century B.C., upon the return from Babylonian exile. Both mouth-genital contacts and homosexual activities, which had previously been associated with the Jewish religious service, as with many others in that part of Asia and in other cultures, were then condemned as representing the way of the Canaanite, the Chaldean or the pagan, and were banned on grounds of idolatry rather than as a sexual crime. Throughout the middle ages homosexuality was associated with heresy, but the reform in the custom soon became a matter of morals, and finally a question for action under criminal law. Jewish codes were brought over into Christian codes by the early adherents of the Church, including St. Paul, and the ecclesiastic law dominated for centuries in Mediaeval Europe on all questions of morals, and became subsequently the basis for the English Common law and the statute laws of England.[3]

History abounds with references to homosexuality, from the post-Homeric Greeks, through Vergil's Roman age, via Persian literature to the Mediaeval period in Europe, the Renaissance in Italy, the Elizabethan period in England and the present day[4]. References may be found in works by such scientific authors as Moll, Krafft-Ebing, Moreau, Forel, Ulrichs, Havelock Ellis, Hirschfeld, von Römer and others. What Havelock Ellis regards as true sexual inversion, he says may be traced in Europe from the beginning of the Christian era[5], and Davis[6] states that among women, homosexual activity is probably as old as humankind, if not older, since it has been observed by Hamilton in baboons and monkeys. The earliest recorded times go back in history to at least 600 years B.C., when Sappho, on her island of Lesbos, gave her name and that of the island to the phenomenon, the name Sapphic or Lesbian love which for 2,500 years has persisted for excessive intimacy among women.

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[1] Clellan S. Ford and Frank A. Beach, Patterns of Sexual Behaviour, London, Eyre and Spottiswoode, 1952, p.125.

[2] Kinsey et al, 1948, Op. Cit., p. 666.

[3] Kinsey et al, 1953, Op. Cit. p. 481.

[4] Edward Carpenter, The Intermediate Sex, London, Geo. Allen and Unwin, Ltd., 1908, pp. 39 ff.

[5] Havelock Ellis, Op. Cit., p. 24.

[6] Katharine Bement Davis, Factors in the Sex Life of 2200 Women, N.Y., Harper and Bros., 1929, p. 239.

Mammalian Background.

In the course of its evolution, the human animal has acquired both its basic anatomy and its physiologic capacities from its mammalian ancestors, and studies of the sexual behaviour of some of the lower mammals may contribute towards an understanding of human sexual behaviour. Hoch and Zubin[1] say, "It is one of the fundamental principles of phylogeny that the wide occurrence or universality of a given structure or physiologic phenomenon among the species of any evolutionarily related group is evidence of the inheritance of that character throughout that group... Whether such biologic inheritance is an adequate basis for considering any activity right or wrong, socially desirable, or undesirable, is an issue which we do not raise, and one which we have never raised. We do contend, however, that sexual acts which are demonstrably part of the phylogenetic heritage of any species cannot be classed as acts contrary to nature, biologically unnatural, abnormal or perverse." They point out that in all primates which have been extensively studied, sexual behaviour includes interaction between like-sexed pairs. Other writers agree on this point. Clifford Allen states, "There is no single act of behaviour amongst those which we know in human beings as sexual perversions which is not to be seen either in the development or in the maturity of the subhuman primate... It is not unreasonable, therefore, at this stage for us to assume that sexual perversions are a residue of the phylogenetic development, which may or may not be a normal part of normal ontogenetic development, but which has made its appearance due to some abnormal factors probably of an environmental nature."[2]

Disregarding the social desirability or undesirability of homosexuality, Ford and Beach agree that, on the basis of zoological evidence, human homosexual tendencies have a definite biological basis, and add, "Furthermore, and most important, there is little indication that these tendencies are restricted to a few deviant individuals. Instead they appear to exist in a large majority of both sexes, although they may not be recognised and although overt homosexual behaviour may not occur."[3] Kinsey et al[4] explain the variations in human sexual behaviour by this basic mammalian capacity for indulging in all types of sexual behaviour. They make the following comment: "The impression that infra-human mammals more or less confine themselves to heterosexual activities is a distortion of the fact which appears to have originated

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[1] Paul H. Hoch and Joseph Zubin, Editors, Psychosexual Development in Health and Disease, N.Y., Grune and Stratton, 1949, pp. 24, 72.

[2] Clifford Allen, Op. Cit., p. 33.

[3] Ford and Beach, Op. Cit. p. 4.

[4] Kinsey et al, 1953, Op. Cit., p. 448.

in a man-made philosophy, rather than in specific observations of mammalian behaviour... They" (biologists and psychologists) "have assumed that heterosexual responses are a part of an animal's innate, 'instinctive' equipment, and that all other types of sexual activity represent 'perversions' of the 'normal instincts' ... It may be true that heterosexual contacts outnumber homosexual contacts in most species of mammals, but it would be hard to demonstrate that this depends upon the 'normality' of heterosexual responses, and the 'abnormality' of homosexual responses."

It has been observed that animals segregated from the opposite sex and reared with those of the same sex, tend to develop homosexual behaviour. Similarly, adolescents who are brought up in reformatories or schools where segregation exists, may develop the same trends. These trends, however, have been observed among animals of other species than homo sapiens, where such segregation of the sexes does not exist. Such homosexual relationships appear to be mutually satisfactory, and may develop between males that have never been isolated from females, and are in no sense of the term sexually deprived. "Adult animals with ready access to the receptive female will upon occasion ignore her and engage in coital behaviour with others of their own sex."[1]

Although inversion of the sexual rôle is particularly common among infrahuman primates, and is frequent among the male mammals, mounting of one female by another is common not only among the primates but in such widely separated species as rats, lions, domestic cats, dogs, sheep, cattle, horses, pigs, rabbits, guinea pigs, hamsters and mice[2] and has been observed in porcupines, marten, antelope and goats[3]. Of the first group, Ford and Beach stress the importance of the fact that in these species, "inversion of mating behaviour is not aberrant; instead it constitutes one aspect of the female's normal sexual repertoire."[4]

It would appear, therefore, to be equally natural to learn both homosexual and heterosexual behaviour, since it occurs in animals as well as in man. This does not imply that homosexuality must be a matter of structure or of biological inheritance.

Geographical Distribution.

If homosexuality is a phenomenon common to all mammals, such behaviour should occur in all human races and cultures. This has, in fact, been found

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[1] Hoch and Zubin, Op. Cit., p. 65.

[2, 4] Ford and Beach, Op. Cit., pp. 141, 142.

[3] Kinsey et al, 1953, Op. Cit., p. 449.

to be the case; homosexuality belongs to no special country, culture or climate, and anthropologists have observed it among most of the primitive peoples. Havelock Ellis[1] points out that it existed in Assyria, Babylonia and Egypt more than 4,000 years ago, that it flourished among Carthaginians, Normans, warlike Dorians, Scythians, Tartars and Celts, and now also among the Sikhs; that it is common in China, where superior male prostitutes are accepted, in India (although not among the Hindus) and Afghanistan; that it is tolerated from Alaska to Brazil and farther south among American Indians; and that it is found in Madagascar, Zanzibar, in native tribes of Africa - Uganda and Upper Congo - and in New Guinea, where boys are chosen for their female appearance and interests.

Freud[2] concurs by stating that among the ancient nations at the height of their culture, inversion was a frequent manifestation, and is still found to be widely prevalent among savages and primitive races.

A child is taught, directly or indirectly, about sex from the earliest years of its life, and it is important that different societies teach different lessons in this regard. Ford and Beach[3] studied the patterns of sexual behaviour in 190 different societies scattered around the world from the edge of the Arctic Circle to the southernmost tip of Australia, and they found that the American pattern of disapproval of any form of homosexual behaviour, for both males and females, differed from the majority of human societies where a large number condone or even encourage homosexuality for at least some members of the population, even though a few other peoples conform to the American disapproval. In spite of social and legal barriers, however, homosexual activities do occur amongst men and women where such activity is taboo. In 49 (64%) of the 76 societies for which information was available, they found that homosexual activities of one sort or another are considered normal and socially acceptable for certain members of the community; in the remainder, homosexual activities on the part of adults were reported to be totally absent, rare, or carried on only in secrecy. In these societies definite and specific social pressure is directed against such behaviour and the penalties range from the lighter sanction of ridicule to the severe threat of death. In a few societies, sodomy constitutes part of the puberty initiation for boys. From their cross-cultural comparisons, they were able to make three generalisations concerning homosexual behaviour in human beings: (1) there is a wide divergence of social attitudes toward this kind of

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[1] Havelock Ellis, Op. Cit., pp. 9 ff. [2] Brill (Ed.) 1938, Op. Cit., p. 556.
[3] Ford and Beach, Op. Cit., pp. 1, 129, 177.

activity; (2) no matter how a particular society may treat homosexuality, the behaviour is very likely to occur in at least a few individuals; and (3) males seem more likely to engage in homosexual activity than do females.

In Christian societies generally, homosexuality is considered both a sin and a crime, whereas among many primitive peoples, the homosexual individual may have a high status, especially among certain Asiatic and American Indian tribes where such people may be found among the medicine men or shamans, and wield a tremendous power[1]. Among the Mohave Indians, for example, homosexuality has been reported by the earliest travellers in that region, and Devereux[2] goes into the subject fully. There are only two homosexual rôles recognised in this society, the male transvestites known as alyha, and the females who assume the male rôle and are known as hwame. Their partners are not considered homosexual. The parents are not proud of having a transvestite in the family, especially a girl, as they are considered somewhat crazy. Initiation into transvestism takes the form of a ceremony, and the subjects are then officially recognised by the community and are not penalised, as it is assumed that these people have a temperamental compulsion and therefore cannot help themselves; the brunt of the teasing is borne by the spouses who have not this excuse. It was said that some women became hwame after having borne a child, but no hwame ever bore a child after assuming that status. Mohave civilisation therefore acknowledges and sanctions the inevitable, thus removing the glamour of secrecy and sin in indulging in the forbidden, and at the same time safeguaring the homosexual from the dangers of persecution.

Homosexuality in Our Culture.

In societies such as our own, which forbid all homosexual behaviour and classify it as unnatural, the social forces which impinge on the developing personality from earliest childhood tend to inhibit, discourage and restrict any such behaviour and to condition the individual to heterosexual stimuli. Thus society attempts to control the behaviour of its component members, and the perversions become a measure of the non-conformity between an individual's behaviour and the mores of the particular society in which he lives. If the homosexual individual is to follow his natural instincts, he

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[1] Kimball Young, Personality and Problems of Adjustment, N.Y., F. S. Crofts and Co., 1941, p. 725.

[2] George Devereux, Institutionalised Homosexuality of the Mohave Indians, Human Biology, 9:4, Dec. 1937, pp. 498 - 527.

is condemned to live in a world of secrecy and shame; if he faces his problem and realises his own nature, his fear of the attitude of the world is stronger than his fear even of the police or the conflict with his own conscience. One result of this social hostility is that the invert tends to band with his fellow-sufferers and to form a community within the structure of society[1], having its own social strata based on social and economic status, but with boundaries that are fairly easily crossed; the younger protegés frequently rise in stratum with their patrons. This community has its own language and customs, and its own particular haunts. A group is formed which can neither be assimilated, destroyed nor recognised[2]. It is composed primarily of males and in this country there does not appear to be a comparable social structure of females, although in other big centres, such as London and Paris, there are clubs where membership is restricted to female homosexuals.

The incidence of male homosexuality in the United States has been estimated by Kinsey et al as 37% of the male population between the beginning of adolescence and old age; this rises to 50% among the males who remain unmarried until the age of 35[3]. The highest incidence is in the group that most loudly voices its disapproval, that is the group that goes into high school but no further in its educational career[4]. The fewest objections to the homosexual are found in the very lowest of the social levels and in the better educated and top levels of society. Myerson and Neustadt[5] made the supposition in 1942 that proportionately greater numbers of homosexuals would be found in the highest and lowest social groups than amongst the middle classes.

Ellis estimated the incidence in the British Isles in 1931 to be 2%[6], "that is to say the same as in other related and neighbouring lands."

In Johannesburg, the passive male homosexuals are drawn from every social stratum of the community, and according to Freed[7] only a small proportion of these are promiscuous and indiscriminate in their sexual relationships. Few of them are prostitutes in the sense that they accept money for sexual congress, and those who do are mainly the poor class of homosexuals. Kinsey[8] states that in some large cities homosexual prostitutes are not far

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[1] Allen, Op. Cit., p. 137. [2] Cory, Op. Cit., p. 47.

[3] Kinsey et al, 1948, Op. Cit., p. 623 [4] Kinsey et al, Ibid, p. 384.

[5] Abraham Myerson and Rudolph Neustadt, Bisexuality and Male Homosexuality, Clinics, 1:4, Dec. 1942, pp. 932 - 957.

[6] Havelock Ellis, Op. Cit. p. 24.

[7] Louis Franklin Freed, The Problem of European Prostitution in Johannesburg, Cape Town & Johannesburg, Juta & Co. Ltd., 1949, p. 67.

[8] Kinsey et al, Ibid, p. 596.

inferior in number to the females who are engaged in heterosexual prostitution; but this form of prostitution constitutes a sociological problem.

Except for those who seduce young children - and these have their counterpart in the heterosexual population - homosexuals do little harm to the community, other than in a negative way by failing to propagate themselves. Our written laws and social customs, however, condemn certain types of sexual behaviour as "acts which are contrary to nature." As Hoch and Zubin point out, "It is to be understood, of course, that neither nature nor biologists were consulted when the codes were first made."[1] "The penalties for sexual acts which are crimes against persons have included imprisonment, torture, the loss of life or limb, banishment, blackmail, social ostracism, the loss of social prestige, renunciation by friends and families, the loss of position in school or in business, severe penalties meted out for convictions of men serving in the armed forces, public condemnation by emotionally insecure and vindictive judges on the bench, and the torture endured by those who live in perpetual fear that their non-conformant sexual behaviour will be exposed to public view. These are the penalties which have been imposed on and against persons who have done no damage to the property or physical bodies of others, but who have failed to adhere to the mandated custom. Such cruelties have not often been matched, except in religious and racial persecutions."[2]

Legal Implications.

The law as applied to homosexuality was criticised by Krafft-Ebing in 1899 in these words, "Beyond a certain age, say 18, when a sufficient degree of moral and intellectual ripeness has been attained, the law has neither the right nor the duty to impugn immoral acts which are committed inter mares, portis clausis and consensu mutuo. The individual himself is responsible for such acts, for they do not violate either public or private interests."[3] Carpenter[4] also criticised the law in England, the Act of 1885, as having "undertaken a censorship over private morals" which is beyond its province and beyond its ability to fulfil, and encouraged the more serious crime of blackmail.

Homosexuality was a capital offence in England as early as 1553, and remained so for the next 275 years until Sir Robert Peel, then Home Secretary, abolished the death penalty for this and many other offences in 1928[5]. Even

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[1,2] Hoch and Zubin, Op. Cit., pp. 13, 16.

[3] Krafft-Ebing, Op. Cit. p. 549, [4] Carpenter, Op. Cit., p. 79.

[5] Westwood, Op. Cit., pp. 80, 83.

so, the death penalty remained in Scotland until only 67 years ago (1889). To-day homosexuality is punishable with two years' imprisonment, and the fact that the activities are performed in private, with the knowledge and consent of both parties, does not legitimise the offence. The law as it stands to-day, with the words "or in private", is particularly favourable to blackmail, and through penalising homosexual approaches as well as homosexual activities has, according to Kinsey et al[1], "developed a breed ot teen-age lawbreakers who first seek satisfaction in sexual contacts with these males, and then blackmail and assault and murder, if necessary, and escape legal punishment on the specious plea that they were protecting themselves from 'indecent sexual advances'." It was reported in the Lancet[2] that when Earl Jowitt became Attorney-General in England in 1929, he was quoted as saying that he was "oppressed to discover that there was a larger quantity of blackmail than he had ever realised, and at least 95% of the blackmail cases which came to his knowledge arose out of homosexuality." It is of interest to note that a committee has been appointed by the Government in England to enquire into the subject of homosexuality, and that the medical profession, with a few exceptions, seems to be sympathetic towards the defendant.

Taylor, in his capacity as Medical Officer of Brixton prison, England, analysed the total number of remand and trial prisoners received during the year 1946. He found[3] that of the total number of prisoners (5,023), 96 or 1.9% were charged with homosexual offences, whilst 198, or 3.9% of the cases were charged with heterosexual offences. Of the 96 homosexuals, 66 were found to be pseudo-homosexuals, 34 of these having some form of mental abnormality or heterosexual tendencies, and in whom the homosexual offence was in the nature of a substitution for the normal heterosexual act. Twelve were bisexuals, or individuals in whom strong heterosexual as well as strong homosexual tendencies were obvious. Five were prostitutes, who would have fallen into the pseudo-homosexual group except for the fact that their homosexual acts were characterised by having been carried out for gain. Of the total of 96, 13 cases were "true inverts", and of these only one was interested in boys. This finding is in accordance with Krafft-Ebing's view that the sexual desire of mature urnings, "in contradistinction to old and decrepit debauchees, who prefer boys (and indulge in pederasty by preference) seems never to be directed to immature males. Only for want of better material, and in case of violent

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1Kinsey et al, 1953, Op. Cit., p. 21.

2Homosexual Crime, The Lancet, 1:22, May, 1954, p. 1136.

3F. H. Taylor, Homosexual Offences and their Relation to Psychotherapy, British Medical Journal, Vol. 2, 1947, pp. 525 - 529.

passion," he adds, "does the urning become dangerous to boys."[1]

The attitude of the law seems always to have been different toward women. The ancient Hittite code made no mention of homosexual activity among females, and references to such activity in the Bible and the Talmud apply primarily to the male, the condemnations being severe and the penalty usually death for the transgressing male. The Talmud regards female homosexual activity as a "mere obscenity", disqualifying a woman from marrying a priest. Mediaeval European history contains abundant records of death imposed upon males for sexual activities with other males, but very few of similar action against females[2]. Perhaps the earliest case recorded in detail was of Catharina Margaretha Lincken, who married another woman and was executed for sodomy in 1721[3].

In England, it is not a legal offence for two women to indulge in homosexual behaviour together in private, provided that both consent and are over the age of 16; nor is such behaviour a matrimonial offence serving as grounds for dissolution of marriage or judicial separation[4]. In America the statutes of only five of the United States do not cover female homosexual relationships, and the law therefore would probably be interpreted in the other States to apply to both sexes equally, although in actual fact practically no females have been prosecuted or convicted anywhere in the United States under these laws. A search by Kinsey and his collaborators through the several hundred sodomy opinions reported in the United States between 1696 and 1952 failed to reveal a single case sustaining the conviction of a female for homosexual activity. There are, however, specific statutes against female homosexual activity in Austria, Greece, Finland and Switzerland, whereas no penalty is incurred when homosexual relations are carried on in private between consenting adults in Scandinavia and some other European countries and also, by an indirection in the wording of its statute, in the state of New York[5].

Letitia Fairfield is in favour of incarceration for women homosexual offenders, in order to protect others from "exposure to infection"[6], but imprisonment for any sex offender is frequently the smallest part of the punishment and the real suffering often begins only when the prison sentence is finished. The punitive attitude of the law and the vengeful attitude of

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[1] Krafft-Ebing, Op. Cit., p. 359. [2] Kinsey et al, 1953, Op. Cit., p. 484.

[3] Havelock Ellis, Op. Cit., p. 195.

[4] British Medical Journal, Vol. 1, Controversial Correspondence on Homosexuality.

[5] Kinsey et al, Ibid, pp. 484, 483.

[6] The Sociological Aspects of Homosexuality (Discussion), Medico-Legal and Criminological Review, 15:1, 1947, pp. 11 - 23.

society towards male homosexuals, with the more tolerant attitude towards females, might lead to greater feelings of guilt or fear in the men, and possibly a greater likelihood of the development of neuroses.

Prevalence of Homosexuality among Females.

The prevalence of homosexuality among females has not been as widely investigated, or aroused as much controversial comment, as homosexuality among males, and is frequently based on supposition. The statement that it is not less common among women than among men is supported by Freud[1], Ellis[2], and by Shaffer[3] who qualifies his support by the word "probably"; the relative scarcity of female homosexuals is commented on by Krafft-Ebing[4], who wrote in 1901 that scarcely 50 cases had been recorded, and by Cory[5].

The paucity of specific data on female homosexuals may be due to a number of causes. On the whole, there seems to be a much greater tolerance of lesbianism than of homosexuality among men; women are less suspect if they live together than men[6]; it is less easy to detect; women have a more natural reticence; our social conventions allow women to be much more demonstrative towards each other[7]; it is not considered serious, or an offence, or grounds for divorce, and is therefore likely to be of less interest to men[8]; in the anthropological field, most of the reporters are men, who would naturally be more interested in the customs of the males and who might find it difficult to interview or obtain information from the females. A few studies have been conducted, however, and these specific data indicate that homosexuality is, in fact, less common among females than among males. Ellis[9] states that it was familiar to the Anglo-Saxons, and that Theodore's Penitential in the seventh century assigned a penance of three years; also that it is found in New Zealand, among Brazilian tribes, American Indians, in Bali, Zanzibar, Egypt, India, and commonly among the negroes and mulattoes of French creole countries. Ford and Beach report[10] that in most other societies, as in our own, feminine homosexuality is accorded much less attention than is comparable behaviour among males, and that specific information concerning homosexual women was available for only 17 of their sample of 190 different peoples. The greater homosexual activity amongst males in the vast majority of human

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[1]Sigmund Freud, 1920, Op. Cit., p. 125.
[2]Havelock Ellis, Op. Cit., p. 195.
[3]Shaffer, Op. Cit., p. 380.
[4]Krafft-Ebing, Op. Cit., p. 576.
[5]Cory, Op. Cit., pp. 86 - 87.
[6]Westwood, Op. Cit., p. 24.
[7]Shaffer, Ibid, p. 380.
[8], [9]Ellis, Ibid, pp. 201, 204.
[10]Ford & Beach, Op. Cit., p. 133.

societies is equally applicable to other animal species and particularly to the infrahuman primates.

Davis (1929) cites a Russian study made in 1907 among university women in Moscow[1] where 52% of 324 women admitted homosexual interest, and of these 16.3% admitted overt homosexual conduct. Davis' own study of 1,200 women showed that over half of the women who answered the questionnaire at some time or other experienced intense emotional relations with other women, and over a quarter admitted that the relationship was carried to the point of overt homosexual expression[2]. There was a greater proportion of women admitting homosexual relationships among those who had had a college education.

Kinsey's data[3] do not support the widespread opinion that homosexuality is more common among females than among males. On the contrary, a comparison of the sexes shows that the percentage of homosexual contacts of the unmarried subjects between the ages of 20 and 35 is between 11% and 20% for the females, and between 18% and 42% for the males. Between 2% and 6% of the unmarried females in the same age group (5% to 22% of the males) had been more or less exclusively homosexual in their responses, that is rating 5 or 6 on the homosexual-heterosexual rating scale.

These two studies would seem to negate the impression that lesbians as a group display certain typical characteristics, or that lesbianism is especially prevalent amongst certain groups. Ellis, for instance, says that it is particularly common amongst prostitutes, also among criminals, "and to a much less extent, among persons of genius and intellect."[4] According to Freed, the accidental sharing of rooms in the slum areas of Johannesburg with prostitutes by innocent working girls occasionally led to lesbianism. Whilst unable to give any estimate of the number of female homosexual prostitutes in Johannesburg, which is considered to be very small, he describes a local lesbian society, headed by a well-known social personality, comprising women drawn mainly from the upper classes who employ girls to live with them for the sake of homosexual relations[5]. These would appear to be pseudo-homosexuals, since they dabble in it "for the sake of its publicity value in certain social sets." In the experience of Fairfield[6] perverted practices are rare, but when they do occur in women, the persons concerned are either "of a very depraved type or belong to the more selfconscious intelligentsia probably searching for excitement." In many cases the practice may well be connected with a certain kind of sophistication in the upper strata of occupation and

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[1] Young, Op. Cit., p. 580.
[2] Davis, Op. Cit., p. 248.
[3] Kinsey et al, 1953, Op. Cit., p. 475.
[4] Ellis, Op. Cit., pp. 204, 212.
[5] Freed, Op. Cit., pp. 196, 60.
[6] Fairfield, Op. Cit., p. 20.

social status, since Kimball Young points out that there is very little data on its prevalence among women in the lower economic brackets of our society.[1] This sort of homosexual experience seems to be merely sensation-hunting and is the antithesis of the homosexual tender love between women described by Deutsch[2]. This deep love is acknowledged and is extremely common amongst women and, in spite of the denial of the sexual ingredient, is nonetheless a truer form of homosexuality than the sexual practices described above.

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[1] Young, Op. Cit., p. 583.

[2] Hélène Deutsch, The Psychology of Women, London, Research Books, Ltd., 1946, p. 263.

## II. THEORIES ON AETIOLOGY.

In the field of homosexuality, perhaps the most frequently asked question is, "What causes this phenomenon?" A number of theories have been put forward, but some of them deal with only one aspect of homosexuality, and others with only certain types of homosexuals. In trying to evolve one theory which should cover the entire field, it is difficult to distinguish between causative factors, sequellae or merely parallel phenomena.

### 1. Psychoanalytic Theories.

Psychoanalytic interpretations of the aetiology of homosexuality are, presumably, largely based on the findings in clinical cases and are applicable mainly to our western societies in which homosexuality is taboo. The case histories that are reported are those of individuals who were sufficiently disturbed by their sexual practices or inclinations to seek psychiatric help through the medium of psychoanalysis. Campbell[1] maintains that many of the Freudian interpretations have no connection with clinical observations and adds, "In fact, if there is any subject in psychiatry that psychoanalytic interpretations miss completely, it is homosexuality." In surveying the psychoanalytic literature, Anna Freud[2] observes that "various authors had stressed the instinctual, bisexual basis of homosexuality; others emphasised the significance of such experiences as intense mother fixation, phallic narcissism, sibling rivalry, and trauma in childhood (related particularly to menstruation and circumcision)." These and other aspects will be briefly reviewed here.

From homosexual case histories, according to Brill[3], many common factors emerge. First is a mother fixation which is established very early and which practically excludes other women ("Love for the mother absorbing all love for the female sex"), resulting in identification with the mother and favouring narcissistic object-choice. Other mechanisms are over-evaluation of the penis; regard or fear of the father; early homosexual seduction; and jealousy of an older brother.

Regarding the process of identification, Freud has shown how largely

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[1] John D. Campbell, Everyday Psychiatry, Philadelphia, J. B. Lippincott Co., 1945, p. 185.

[2] Anna Freud, Psychol. Abstracts, 1950, p. 337.

[3] A. A. Brill, 1934, Op. Cit., p. 960.

this bulks in human mentality, and Karen Horney[1] considers this identification with the parent of the opposite sex to be the "point from which in either sex both homosexuality and the castration complex are evolved." In our society, those "criminals who get into difficulties because of their homosexuality" are quoted by Kimball Young as striking demonstrations of the persistence of undue childish attachment of the son to his mother[2]. This attachment, in the case of homosexual men, seems to be so typical that the Freudian school refers to it as a 'mother complex' and sees in it a cause of homosexuality. Hirschfeld, however, regarded this view as erroneous and argued[3] that "the homosexual does not develop his homosexuality because he feels strongly attracted to his mother from childhood, but vaguely sensing his weakness and peculiarity he leans on his mother who, on her part, and also instinctively, makes him her favourite child." Stekel[4], on the other hand, compromises by agreeing that identification of the subject with his mother is one cause of homosexuality. If it were the sole ætiological factor it should be present in every case history; but as Jonas[5] points out, the unusually high incidence of mother favouritism, suitor relationship and other Œdipus crystallisations favours the theory that mother identification is one of the several psychogenic mechanisms, and probably the major factor, in male homosexuality.

In female homosexuality, this primary mother tie must, according to Hélène Deutsch[6], be strengthened by other elements in order to infringe so powerfully and directly upon the woman's adult life. "These additional elements gain their decisive strength during puberty. In the triangular situation, the mother's attraction and the girl's eternal longing for her must prove stronger than the biologic demand of heterosexuality." The original mother tie is always affected during puberty by the father's favourable or unfavourable influence. "His love may be rejected by the girl as a result of fear; her disappointment in him, or his failure to gratify her, may influence her need for love in favour of the earlier mother tie. Her sense of guilt, and her need to reconcile herself with her mother, strengthen the attraction of the mother's magnetic field."

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[1] Karen Horney, Genesis of the Castration Complex in Women, Internat. J. Psychoanal., 5:1, Jan. 1924, pp. 50-65.

[2] Kimball Young, Op. Cit., p. 677.

[3] Magnus Hirschfeld, Sexual Anomalies and Perversions, London, Encyclopædia Press, 1952, p. 247.

[4] Stekel, quoted by Hirschfeld, Ibid, p. 263.

[5] Carl H. Jonas, An Objective Approach to the Personality and Environment in Homosexuality, Psychiat. Quart. 18, Jan. 1944, pp. 626 - 641.

[6] Deutsch, Op. Cit., p. 278.

Strongly connected with the identification of the son with his mother, is his rivalry with the father and siblings. According to Silverberg[1] the unconscious mechanism in passive male homosexuality is a desire to have the woman for himself. The child offers himself as a sexual object to the father, so that the father will have no sexual need for the mother, thus leaving the mother free to be the exclusive sexual property of the child. This motivation, to separate the parents, is a direct expression of what is implied in the Œdipus strivings. In summarising the analysis of a case of male homosexuality, Lewinsky[2] found that the homosexuality was a reaction to a very severe prohibition against masturbation, an "erotized fixation to that part of the Œdipus Complex in which the boy was unable to cope with his rivalry in relation to his father and his brothers." Difficulties in the Œdipal stage, rivalry with the mother and predominance of castration feelings always, according to Brody[3], lead to a more or less marked tendency toward homosexuality.

Many of the Freudian concepts are based on the male genitalia, the main concepts being the castration complex in males and penis envy in females, both of which have been quoted as contributing towards, if not causing, homosexuality. Freud[4] sums it up as follows: "Because of the residual influence of the castration complex, men retain a certain amount of disdain for women, whom they presume to be castrated. In extreme cases this results in an inhibition of object choice, and if supported by accessory organic factors, in absolute homosexuality. The effects of the castration complex are entirely different in a woman. She recognises that she is castrated, and that consequently she is inferior to men, and they superior - but she struggles against this unhappy state of affairs... This 'masculinity complex' of women may also result in a manifest homosexual choice of object." As far as the girl is concerned, the discovery of her organic inferiority need not necessarily lead to this 'defiant over-emphasis of her own masculinity'; two other paths may diverge from this point, namely that which leads to the suspension of the whole sexual life, or the first step towards definite femininity[5]. In discussing eidolic types, Hoch and Zubin say that "male pairs are based on the reassuring presence, female pairs on the reassuring absence, of the male

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[1] William V. Silverberg, The Personal Basis and Social Significance of Passive Male Homosexuality. Psychiatry, 1:1, Feb. 1938, pp. 41 - 54.

[2] Hilde Lewinsky, Features from a Case of Homosexuality. Psychoanal. Quart., 21:3, 1952, pp. 344 - 354.

[3] Brody, Op. Cit., p. 56.

[4] Sigmund Freud, Concerning the Sexuality of Woman, Psychoanal. Quart., Vol. 1, 1932, pp. 191 - 209.

[5] Sigmund Freud, Female Sexuality, Internat. J. Psychoanal., 13:3, Jul. 1932, pp. 281 - 297.

organ"[1]

Many writers ore of the opinion that homosexuality is either a form of regression or of fixation at an earlier libidinal level. The Freudian explanation of homosexuality (fixation at the narcissistic stage) was the one which seemed to find the greatest support among psychiatrists a quarter of a century ago[2]. Glover[3] has observed that "there is hardly a component of infantile sexuality that cannot be pressed into the service of adult homosexuality... The sexual perversions ... are derived and built up from infantile sexual components; they are in the nature of regressions to earlier systems which ... are ... so organised that they take the place of normal sexual activity." Stanley-Jones[4] maintains that the major factor in the causation of homosexuality is "a fixation at the point of transition to heterosexuality" whilst according to Freud[5] fixations of the libido to conditions at earlier phases are found in analysis, and manifest homosexuality is one example of an inhibition in development of this kind. As Clifford Allen comments[6], "There is no doubt that evidence can be produced to show that homosexuals have fixations anywhere along the avenue of emotional development."

The early emotional background of a child is extremely important in regard to its psychological development, and any imbalance or conflict in this sphere may lead to homosexuality. Mackwood[7] is of the opinion that the great majority of cases of homosexuality are due to emotional deprivations and immaturity from a maladjusted upbringing, except perhaps for those cases with a severe constitutional and temperamental loading. To Clifford Allen[8] it seems "that homosexuality can be produced by the persistence of excessive emotion, either negative or positive, which has been aroused by the parents in the past", that is by hostility to or excessive affection for either the mother or the father. A bisexual oscillation between mother and father is, according to Deutsch[9], abundantly evidenced in analytic experience and "may eventuate in neurosis, heterosexuality or inversion."

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[1]Hoch and Zubin (Eds.) Op. Cit., p. 182. [2]Davis, Op. Cit., p. 244.

[3]Edward Glover, The Social and Legal Aspects of Sexual Abnormality, Medico-legal and Criminol. Rev., 13:3, Jul. - Sept. 1945, pp. 133 - 148.

[4]Stanley-Jones, Op. Cit., pp. 366 - 369.

[5]Sigmund Freud, An Outline of Psycho-analysis, London, Hogarth Press, 1949, p. 14.

[6]Clifford Allen, Op. Cit., p. 131.

[7]Mackwood, Medico-legal and Criminol. Rev., Op. Cit., p. 16.

[8]Allen, Ibid, p. 127.

[9]Hélène Deutsch, On Female Homosexuality, Psychoanal. Quart., 1, 1932, pp. 484 - 510.

Such other emotions as sadism, masochism and aggression are also involved in homosexuality. "The pre- Œdipal aggression is oral sadistic and its intensification is considered by Jones[1] as the central characteristic of homosexuality in women." Bergler traces homosexuality to the oral trauma of weaning which results in an aggressive conflict producing psychic masochism. Dealing first with females, he states[2] that "Lesbians labour under a complicated conflict reducible to the terms 'masochistically "mistreated" child - cruel, refusing mother'," and adds further, "Lesbianism is, paradoxically, not an erotic but an aggressive conflict; the basis of psychic masochism is an undigested aggressive conflict which boomerangs because of guilt, and is only secondarily libidinised." He states categorically[3] (and introduces four cases of lesbians to substantiate his theory), "In every case of lesbianism, we find the typical personality which is characteristic for all orally regressed people. They are unconscious provokers of 'injustices', masochistically self-provoked and self-enjoyed, warded off with pseudo-aggression." He describes a male homosexual as[4] a person "who predominantly uses the unconsciously based defence mechanism of man-man relationship to escape his repressed masochistic attitude to the mother, and who shows predominantly in his personality the mechanism of the 'injustice collector'. Only the combination of the two ingredients constitutes the homosexual." Bergler goes on to say[5], "Male homosexuals are neither the 'higher class' of person they claim to be, offering as proof the names of renowned perverts, nor the mysterious 'third sex', nor 'something special'. They are unconsciously simply frightened fugitives from women, fleeing in their panic to 'another continent'." He claims[6] that "there are no happy homosexuals; and there would not be, even if the outer world left them in peace. The reason is an internal one. Unconsciously they want to be disappointed, as does every adherent to the mechanism of orality." As a typically unconscious psychic situation in families producing homosexuality, a situation "masochistically self-elaborated", he finds[7] (a) an aggressive, dominating mother as the child's sole educator, or a father having a weak personality; (b) the child hates the mother and is incapable of splitting off the pre-Œdipal ambivalent attitude toward her; (c) the Œdipus complex therefore never reaches the normal height; and (d) self-damaging tendencies predominate under a pseudo-aggressive façade

The Adlerian view of homosexuality is that it is based on fear. According to Adler, homosexuality represents "a training of a discouraged

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[1] Jones, 1927, quoted by Brody, Op. Cit., p. 57.

[2] Edmund Bergler, Lesbianism, Facts and Fiction, Marriage Hygiene, 1:4, May 1948, pp. 197 - 201.

[3, 4, 5, 6, 7] Bergler, Neurotic Counterfeit Sex, Op. Cit., pp. 317 - 318, 194, 185, 193, 327.

individual from childhood to avoid a normal solution of the sexual problem by eliminating the possibility of defeat, i.e. the opposite sex."[1] Homosexuality is therefore rooted in fear of women, caused by a strong feeling of inferiority. Karen Horney elaborates this theory as follows[2]: "In analysis this dread of women is revealed quite clearly. Male homosexuality has for its basis ... the desire to escape from the female genital, or to deny its very existence... What we actually see is dread of the vagina, thinly disguised under the abhorrence. Only anxiety is a strong enough motive to hold back from his goal a man whose libido is assuredly urging him on to union with the woman." This reaction is "dread of his own inadequacy, of being rejected and derided... His original dread of women is not castration anxiety at all, but a reaction to the menace to his self-respect." She points out that the man has to prove his manhood by doing: the woman, even if she is frigid, can perform her part, even to the point of conceiving and bearing a child, by merely being, and this fact has always filled men with admiration and resentment. One way of avoiding the soreness of a narcissistic scar, is, she adds, "by adopting the attitude described by Freud as the propensity to debase the love-object." Horney concludes that, "carried back to its ultimate biological foundations, the man's dread of the woman is genital-narcissistic, while the woman's dread of the man is physical."[3]

Opinions of the value of psychotherapy in cases of homosexuality are divided. Glover[4] suggested that the sexual perversions, in which he included homosexuality, require suitable psychological observations and treatment, and added, "No other form of handling has the slightest chance of success." However, when psychotherapy was tried on 13 cases of true inverts in prison, in only one case was there any indication that the therapy would be of any value, and then only as a palliative and not a cure. Of the balance, seven had already had psychological treatment with no improvement therefrom; three refused all interference, and one was too mentally dull; one had already been rejected as unsuitable[5]. Bergler[6], however, claims that "the initial pessism toward psycho-analytic treatment of homosexuals ... is completely unjustified", and following a report of four cured cases adds that

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[1] Hirschfeld, Op. Cit., p. 270.

[2] Karen Horney, The Dread of Woman, Internat. J. Psychoanal., 13:3, Jul. 1932, pp. 348 - 360.

[3] Horney, The Denial of the Vagina, Internat. J. Psychoanal., 14:1, Jan. 1933, pp. 57 - 70.

[4] Glover, 1945, Op. Cit., P. 137.

[5] Taylor, Op. Cit., pp. 525 - 529.

[6] Bergler, The Myth of a New National Disease, Psych. Quart., 22, Jan. 1948, pp. 66 - 88.

"lesbianism has in most cases, as does male homosexuality, an excellent prognosis in analysis."[1]

In view of the foregoing theories, it might be expected that homosexuals would exhibit a number of neurotic traits in a test such as the Wechsler-Bellevue which claims to be able to diagnose neuroses.

2. Conditioned State.

Before accepting the idea that the homosexual pattern of behaviour in any individual is either inherited, or so innately fixed that no modification of it may be expected within his lifetime, the possibility should be considered that patterns of homosexuality or heterosexuality may represent learned behaviour which depends, to a considerable degree, upon the mores of the culture in which the individual is raised.

Kinsey et al[2] make the following statement: "The scientific data which are accumulating make it appear that, if circumstances had been propitious, most individuals might have become conditioned in any direction, even into activities which they now consider quite unacceptable. There is little evidence of the existence of such a thing as innate perversity, even among those individuals whose sexual activities society has been least inclined to accept."

According to Hoch and Zubin, the powerful forces of psychologic conditioning may be seen in the development of an individual's psychosexual pattern. In the human animal, this pattern originates in indiscriminate sexual responses which, as a product of conditioning and social pressures, become increasingly restricted in the direction of traditional interpretations of what is normal or abnormal in sexual behaviour. They point out that this is not the Freudian picture of the development of the psychosexual through narcissistic and homosexual stages which lead, in maturity, to heterosexuality; and that neither does it support the interpretation of masturbation or homosexuality in an adult as the product of fixation at immature stages of development. They add that their preliminary examination of over 7,000 histories of males, and nearly as many of females, "shows that an exceedingly small portion of them ever passed through the hypothesized stages." Their results of a comparative survey "tend to favour the belief that exclusively heterosexual or homosexual behaviour in human beings is a product of indi-

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[1] Bergler, Neurotic Counterfeit Sex, Op. Cit., p. 342.

[2] Kinsey et al, 1948, Op. Cit., p. 678

vidual experience and learning. It appears probable that in the absence of cultural channelisation many if not all men and women would possess the capacity for complete erotic response to members of either sex."[1] They believe that erotic responsiveness must be gradually conditioned to a particular type of sexual object. This view is supported by Ford and Beach who contend that human sexual behaviour is controlled and directed primarily by learning and experience. They maintain that it is possible to take an individual whose physiological constitution is entirely normal and, by a process of cultural and individual conditioning, make that person an exclusive homosexual, this being possible precisely because human sexuality is so labile and so dependent upon individual experience. They state[2]: "It is our opinion ... that the occurrence of exclusive homosexuality in the face of severe disapproval is due primarily to learning rather than to constitutional factors. In other words, men and women who are exclusively homosexual become so because of personal experience rather than because of some imperative, inherited urge. Of equal importance is the point that total absence of any conscious response to homosexual stimuli probably reflects the inhibiting effects of social conditioning."

Shaffer[3] is of the opinion that, although homosexuality may be caused by a number of quite varied accidents of experience, the most probable explanation of all cases of this maldevelopment is in terms of conditioning and adjustment. He is supported by Landis and Bolles[4] who suggest that "in many instances the simplest explanation is in terms of a fixation of a conditioned emotional response."

Some external environmental causes which may condition a child to homosexuality are mentioned by Allen. One cause is hostility, unconscious or persistent, to the mother; never having had a woman to love, the child cannot learn to transfer affection to other women and often "drifts into homosexuality and finding it pleasurable becomes more and more conditioned to it." Another cause is identification with and excessive attachment to the females in his environment because of the fact that the father is in some way a nonentity - dead, abroad, frequently absent and so on. Identifying himself with women, the child feels himself feminine and can love only males. "The manifestations of homosexuality which follow are the results partly of physical limitation, partly of conditioning, and partly of the psychosexual development so stressed

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[1] Hoch and Zubin, Op. Cit., pp. 27, 66.
[2] Ford and Beach, Op. Cit. p. 266.
[3] Shaffer, Op. Cit., p. 380.
[4] Landis and Bolles, Op. Cit. p. 249
[5] Allen, Op. Cit., p. 127.

by Freud and his followers." Westwood[1] suggests an over-aggressive father as a further environmental cause of homosexuality.

Whilst the effect of childhood experiences is important in the development of adult patterns of behaviour, it must be remembered that one may continue to learn and to be conditioned by new types of situations at any time during one's life. For this reason, experiences during adolescence may assume special significance. Allen[2] believes that the sexuality can be injured by lack of success in sexual behaviour at the time of puberty, or by painful results such as gonorrhoea from attempted sexual behaviour, thus causing the adolescent to fall back on previous reactions. Homosexuality may then appear as a substitution for heterosexuality, since the latter has been painfully conditioned. He also considers that segregation of the sexes, and particularly the unmixed public school in which young men remain until they are 18 or even 19 years old, is a source of a great deal of homosexuality. Westwood agrees[3] that this segregation in adolescence exposes the child more readily to homosexual contacts and therefore to conditioning to homosexuality. Kinsey et al[4] quote the pre-adolescent boy who, convicted of some offence, may be sent to a juvenile institution where he turns adolescent and reaches the peak of his sexual capacity in a community which is exclusively male. Later social and socio-sexual adjustments with girls may prove difficult and he may continue his homosexual activities for the rest of his life, thus being "penalised for being what society has made him."

As Henry points out, however, "few persons escape an overt homosexual experience at some period in life and desires are universal."[5] The result of such experiences appears to depend upon the kind and amount of repression and the associated conflict. Stanley-Jones believes that the emotional trauma suffered in the first instance by a boy who has been involved in a homosexual friendship is minimal, even when it is complicated by manifestations of physical sex. This form of homosexual friendship most frequently occurs during late adolescence and is, according to Landis and Bolles,[6] "merely a passing phase - a form of sex experimentation - in certain persons who pass on to heterosexual orientation without any particular psychological trauma." As Ellis[7] points out, "The seed of suggestion can only develop when it falls on a suitable soil."

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[1] Westwood, Op. Cit., p. 40.

[2] Allen, Op. Cit., pp. 43, 277.

[3] Westwood, Ibid, p. 40.

[4] Kinsey et al, 1953, Op. Cit., p. 21

[5] George W. Henry, Psychogenic Factors in Overt Homosexuality, Am. J. Psychiat., 93:4, Jan. 1937, pp. 889 - 908.

[6] Landis and Bolles, Op. Cit., p. 249.

[7] Ellis, Op. Cit., p. 270.

The controversy over the significance of conditioning on homosexual behaviour seems to be summed up by Allen[1] as follows: "Whether the abnormal modes of expression are fundamentally erotic as Freud and the psychoanalytic school insist, or whether they are merely patterns of behaviour which become sexually conditioned through environmental circumstances, we do not yet know for certain, nor does there seem to be any way of proving it."

3. Congenital, Hereditary and Constitutional.

Many of the older writers felt that the homosexual was born, and not made, that his preference for his own sex was a congenital anomaly. Krafft-Ebing[2] sums this up by saying, "If the urning feels perversely, it is not his fault, but the fault of an abnormal condition natural to him." Benkert also emphasises that homosexuality, which occurs both in men and in women, is "congenital and unconquerable."[3] Ellis[4] believes that the average invert, moving in ordinary society, is a person of average general health, though very frequently with hereditary relationships that are markedly neurotic. "He is usually the subject of a congenital predisposing abnormality, or complexus of minor abnormalities, making it difficult or impossible for him to feel sexual attraction to the opposite sex, and easy to feel sexual attraction to his own sex. This abnormality either appears spontaneously from the first, by development or arrest of development, or it is called into activity by some accidental circumstance." Terman and Miles[5] state that "many if not the majority of students accept the theory that sexual inversion is not a product of psychological conditioning, but is inborn."

The chief protagonist of heredity as the prime factor in homosexuality is Hirschfeld[6]. He confirms Dr. von Römer's observation that homosexuality runs in families in at least 35% of the cases and, referring to the neuropathic disposition of the homosexual, adds, "Although homosexuals cannot be regarded as degenerates, it is nevertheless certain that hereditary factors play an important rôle in the genesis of homosexuality, which would in any case appear to be eminently probable in such a distinctly congenital phenomenon as homosexuality." The reply of Hoch and Zubin[7] to this argument is that "if heredity is involved in human behaviour, it is much more likely to be involved indirectly, by way of the inheritance of physical characteristics

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[1] Allen, Op. Cit., p. 59.
[2] Krafft-Ebing, Op. Cit., p. 541.
[3] Hirschfeld, Op. Cit., p. 226.
[4] Ellis, Op. Cit., p. 324.
[5] L. M. Terman and C. C. Miles, Sex and Personality, New York and London, McGraw Hill Book Co. Inc., 1936, pp. 6 - 7.
[6] Hirschfeld, Op. Cit., pp. 278 - 279.
[7] Hoch and Zubin, Op. Cit., p. 22.

or physiologic qualities which may help determine personality."

A constitutional predisposition to certain afflictions, such as dysphemia for example, has been assumed by a number of authorities, and this applies equally in the field of homosexuality. The factors which may influence this constitutional predisposition to the attitudes or physical features of the opposite sex may be endocrine or other factors, according to Kimball Young[1]. Greenspan and Campbell[2] are emphatic that the origin of homosexuality "is always constitutional or biological, never environmental or acquired", although the manifestation of it "may occur early, via arrested psychosexual development, or late, through the medium of regression." Campbell[3] refers to homosexuality as a constitutional deviation or aberration which is not due to an unresolved hatred of a parent, and goes on to say[4], "The homosexual personality being neither degenerate, psychopathic nor psychoneurotic, is a biological anomaly, accompanied by characteristic personality traits... The homosexual personality is neither the result of bad environment nor of an undue mother attachment... There is no such thing as acquired homosexuality; the bisexual theory presumes a varying degree of homosexuality in every individual..." [5]"The homosexual is a biological invert with his psychosexual development showing a specific arrest."

Jonas[6] argues as follows: "As far as those are concerned who are proponents of hereditary, congenital or constitutional factors as prime determinants in homosexuality, the work of Kinsey presents the unavoidable conclusion that something around a half of the population possesses the hereditary, congenital and constitutional potentialities to react as homosexuals." This may well be so, but Brill[7] explains this by his observation that "the constitutional factor must wait for experiences which bring it to the surface, while the accidental factor needs the support of the constitutional factor in order to become effective."

4. Genetics.

Efforts have been made, chiefly from eugenic quarters, to explain such illnesses as insanity and criminality (presumably including sexual perversions) from the genetic point of view. It has been suggested that these responses are due to an inborn abnormality.

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[1]Kimball Young, Op. Cit., p. 582.
[2]Greenspan and Campbell, Op. Cit., p. 682.
[3]Campbell, Op. Cit., p. 130.
[4, 5]Campbell, Ibid, pp. 185, 279.
[6]Jonas, Op. Cit., p. 635.
[7]Brill (Ed.) 1938, Op. Cit., p. 626.

In an investigation of 'male-ness' and 'female-ness', Romanoff[1] states that there is ample evidence indicating that the X-chromosomes are not the sole bearers of sex determining factors, but that such factors are contained in the autosomes as well, the latter making for maleness and the former for femaleness, sex therefore being determined by a balancing of factors contained both in the autosomes and in the X-chromosomes. Designating strong and weak factors for maleness by 'M' and 'm' respectively, and strong and weak factors for femaleness by 'F' and 'f' respectively, six possible types of males and nine possible types of females may be distinguished with reference to psycho-sexual make-up, among whom there would be 54 possible types of matings. Extremely homosexual individuals may therefore be the offspring of approximately normal parents and vice versa. He sums this up as follows: "In other words, in so far as anomalies of sexual make-up are of hereditary or germinal origin, their transmission from generation to generation is complicated and is characterised by a wider range of variations in females as compared with males."

Lang investigated the relatives of 1,105 cases taken at random from 4,200 male homosexuals in Hamburg and Munich and found that the sex ratio of siblings was male:female::121.1:100, "thus deviating clearly from the normal proportion of 106:100." This sibling sex deviation was more marked in those homosexuals who were over 25 years of age, and were therefore more likely to represent genuine homosexuals, the ratios being 128.3:100 in these cases, and 113.2:100 in the cases under 25 years of age. Lang says[2] that these results "suggest strongly that many cases of homosexuality are hereditarily determined and are best explained by a genetic mechanism, in the sense of Goldschmidt's 'Valenz' theory." In the actual children of homosexuals, however, he found the ratio to be 106.9:100 and on this finding Allen[3] claims that the theory obviously "falls to the ground to a large extent."

Following up Goldschmidt's theory of sex intergrades (based on his study of gynandromorphs), Darke carried out an investigation on 100 male homosexual prisoners plus 32 cases from Volume I of Henry's "Sex Variants", to determine whether male:female ratio differed significantly from the expected ratio. He found[4] that the application of Goldschmidt's developmental balance theory gave no evidence of an hereditary ætiologic determination of homo-

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[1] Aaron J. Romanoff, A Theory of Chaotic Sexuality, Am. J. of Psychiat., 92:1, July 1935, pp. 35 - 41.

[2] Theo. Lang, Studies on the Genetic Determination of Homosexuality, J. Ner. Ment. Dis., 92:1, Jul. 1940, pp. 55 - 64.

[3] Allen, Op. Cit., p. 117.

[4] Roy A. Darke, Heredity as an Aetiological Factor in Homosexuality, J. Ner. Ment. Dis., 107:3, Mar. 1948, pp. 251 - 268.

sexuality in human beings. Individuals who continued passive sodomy beyond the age of 25 had a greater than expected number of female siblings, and passive penile fellators[1] under the age of 25 had a predominance of male siblings; this latter significant deviation from expectance was not found in the group of older passive penile fellators. No explanation is offered for this finding, but it may very possibly be due merely to the small numbers involved in these two groups.

Kallmann studied 40 pairs of monozygotic twins[2] and found the majority of the pairs to be "not only fully concordant as to the overt practice and quantitative rating of their aberrant sex pattern" but also "very similar in both the part taken in their individual sex activities and the visible extent of feminised appearance and behaviour displayed by some of them." Six of these cases were also concordant with respect to schizophrenic episodes either before or after the manifestation of their homosexual tendencies; at least 22 cases were classified as definitely schizoid, severely unstable with obsessive-compulsive features, or excessively alcoholic; transvestism was observed in seven of the cases; and only ten twin subjects were diagnosed as sufficiently adjusted, both emotionally and socially. All 40 pairs categorically denied any history of mutuality in overt sex relations, thus detracting from the theory of narcissistic object choice. Most of the index pairs asserted that they had developed their sexual tendencies independently and often far apart from each other[3]. Kallmann suggests, therefore, that a genetically oriented "imbalance" theory has not been eliminated as a possible explanation for certain groups of male homosexuals, and that "the underlying disturbance is probably hormonal in nature, in the sense of a genically controlled disarrangement in the male-female sex hormone balance, rather than the result of a chromosomal (mutational) aberration or of an incomplete process of sex-reversal." He considers further that these findings of practically complete concordance as to overt homosexuality in monozygotic male twin pairs throws some doubt on the validity of purely psychodynamic theories of predominantly or exclusively homosexual behaviour patterns in adulthood.

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[1] Fellator : a male who indulges in fellatio or oro-genital contact.

[2] Franz J. Kallmann, Comparative Twin Study on the Genetic Aspects of Male Homosexuality, J. Ner. Ment. Dis., 115:4, Apr. 1952, pp. 283 - 298.

[3] Franz J. Kallmann, Twin and Sibship Study of Overt Male Homosexuality, Am. J. Human Genetics, 4:2, June 1952, pp. 136 - 146.

5. Endocrinology.

One theory that held sway for some time, and which led to a certain amount of research with conflicting results, was that homosexuality was the result of an endocrine imbalance.

The secondary sex characteristics which develop at puberty are very largely the result of hormone secretions by the anterior lobe of the pituitary gland, working in conjunction with other glands and organs. The male sex hormone is testosterone and the female sex hormone is oestrone or estrin. The amount and type of sex hormones present in an individual are determined by urine and blood assays. Early reports found no sex hormone secretions in the urine of children, but Carmichael[1] points out that more recent studies have demonstrated such secretions.

Research reported by Wright[2] shows a definite content of estrin in the normal male urine and in testis tissue, and a certain content of male hormone in the female urine. He adds, "In the male we do not know what tissue produces estrin, nor in the female is it positive what part of the ovaries gives off the male hormone. It is probable that the interstitial cells are mainly concerned in both sexes." This finding, however, would seem in some measure to substantiate the argument that, by virtue of the fact that every individual has one male and one female parent, all individuals are therefore part male and part female. The supporters of the endocrine imbalance theory suggest that the male and female hormone content present in homosexuals is abnormally disproportionate to their physical sex, thus causing the male to become more feminine and the female more masculine. Some attempts have been made to prove this as well as to counteract it therapeutically.

Distinguishing between "acquired sodomy" and "true homosexuality", Wright points out that the latter usually originates early in life, and that the frequently exhibited mannerisms, gait and manner of speech of the opposite sex, as well as heterosexual bodily characteristics, also frequently begin in youth or puberty when the pituitary gland starts to secrete sex hormones; he argues that these facts indicate an endocrine ætiology in homosexuality. Supporting this, he found in homosexual subjects a constant inversion of male and female sex hormones. Similar findings to those of Wright were reported by Neustadt and Myerson who found that 25 out of 29 homosexuals showed the

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[1] Hugh T. Carmichael, The Rôle of the Endocrines in Mental Disorders, J. Abn. Soc. Psychol., 33:2, Apr. 1938, pp. 205 - 215.

[2] Clifford A. Wright, Endocrine Aspects of Homosexuality, Med. Rec., 142:9, Nov. 1935, pp. 407 - 410.

same characteristic staircase sign, namely male hormones relatively lower and an excess of estrogens (female hormones)[1]. This sign was absent in other sexual abnormalities, especially transvestism, and in very young children.

On the basis of 17 clinically diagnosed male homosexuals and 31 normal males as controls, Glass, Devel and Wright[2] also found the estrogenic values to be higher among the homosexuals, whereas there were less striking differences in the androgenic (male hormone) values, and concluded that "in face of such highly suggestive hormonal differences, one may assume that such data point to a definite biologic mechanism in homosexuality," and that, "It seems that the constitutional homosexual has a different sex hormone chemistry than the normal male." This conclusion is criticised by Sandor Rado[3] as follows: "Sex in its entirety refers to the differentiation in the individuals as regards their contra-related action systems of reproduction... It is not permissible to single out any one element, no matter how conspicuous, such as the gonad, and make it the sole criterion of sex. To attempt to determine 'maleness' or 'femaleness' by the relative percentage of male and female hormones in blood or urine is obviously to carry this error to an extreme."

A gonadotrophic assay was carried out by Sevringhaus and Chornyak[4] on 21 overt, aggressive male homosexuals; ten of these subjects had no gonadotrophic hormone in the 24-hour urine samples examined. "This failure to find the pituitary hormone is a distinct contrast with the results in the cases of the control group where in all six men who were studied, there was some gonadotrophic hormone present in at least one of two specimens." It should not be overlooked, however, that there were also 11 of the homosexual group "whose gonadotrophic hormone secretion was comparable to that shown by the control group." Although this finding does not in any way explain homosexual behaviour, the writers suggest that it might add to the conviction that there is an endocrine disturbance accompanying such behaviour in many cases.

Appel and Flaherty were unable to confirm the constant inversion

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[1] Neustadt and Myerson, Quantitative Sex Hormone Studies in Homosexuality, Childhood and Various Neuropsychiatric Disturbances, Am. J. Psychiat., 97, Nov. 1940, p. 524.

[2] S. J. Glass, H. J. Devel and C. A. Wright, Sex Hormone Studies in Male Homosexuality, Endocrinology, 26:4, Apr. 1940, pp. 590 - 594.

[3] Sandor Rado, A Critical Examination of the Concept of Bisexuality, Psychosom. Med., 2:4, Oct. 1940, pp. 459 - 467.

[4] E. L. Sevringhaus and John Chornyak, A Study of Homosexual Adult Males, Psychosom. Med., 7:5, Sept. 1945, pp. 302 - 304.

of male and female sex hormones in homosexuals[1], mentioned by Wright above. Such diverse results may have been due to the fact that the same assay methods were not used by the different workers. In addition, Carmichael[2] warns that hormone levels in blood and urine vary from day to day and differ also at the various age levels. In view of their contradictory results, Appel and Flaherty urge conservatism in the interpretation of endocrine findings in cases of homosexuality, where investigations are tentative, where information regarding the controls is meagre, and where factors quite unrelated to homosexuality, such as disease, diet and altered metabolism, may cause variations in the excretion of sex hormones.

Williams[3] studied 28 male homosexuals who had been under treatment for drug addiction and divided them into two groups. He described 12 as "feminine" male homosexuals, having the physical form of the male and the sexual temperament of the female, with a preference for assuming the feminine rôle in homosexual intercourse, and 16 as "masculine" male homosexuals. Post-addict subjects formed his control group. The subcutaneous administration to a patient of one mg. of prostigmine characteristically results in a reduction of serum cholinesterase of the same magnitude in women as in men, but this reduction was absent in the 12 "feminine" males studied. Williams has no explanation to offer for this phenomenon. On the other hand, the results with the control group were practically identical with the 16 "masculine" male homosexuals, suggesting either that there is "no marked prostigmine-cholinesterase abnormality associated with the masculine male homosexual, or that we were not studying the true masculine male homosexual." He classed this group as "facultative masculine male homosexuals", i.e. substituting homosexuality for heterosexuality because of circumstances. It might also be argued, however, that they were in fact "true masculine male homosexuals", but that the administration of prostigmine does not differentiate between the "masculine" homosexual and the heterosexual.

Reverting to the inversion of male and female sex hormones, Wright attempted to counterbalance this in a therapeutic experiment on ten male and two female homosexuals. He carried out treatment with anterior pituitary sex hormone (prolan A) in conjunction with eschatin in the male, which produced "favourable results."[4] He also carried out endocrine treatment for approx-

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[1] Kenneth E. Appel and James A. Flaherty, Endocrine Studies in Cases of Homosexuality, Arch. Neur. and Psych., 37:5, May 1937, pp. 1206 - 1207.

[2] Carmichael, Op. Cit. p. 213.

[3] Edwin G. Williams, Homosexuality : A Biological Anomaly, J. Ner. Ment. Dis., 99:1, Jan. 1944, pp. 65 - 70.

[4] Wright, Med. Rec., 1935, Op. Cit., p. 409.

imately one year on 14 patients and 31 normals, and whilst questioning the value of subjective evidence regarding sexual status, particularly in a custodial group, reported the following claims: nine cases reported improvement from treatment, three of these claiming to be normal; four reported improvement from other causes than treatment; and one reported no improvement.[1]

Eleven male homosexuals were subjected by Glass and Johnson[2] to trials with organotherapy to observe whether the administration of testosterone buffered with chorionic gonadotropin for periods varying from three to 24 months could favourably influence their psychosexual behaviour. Only three of the subjects reported benefit from the therapy; five reported an intensification of the homosexual drive. The authors of this report, however, claim that in appropriate cases the results are "too good to permit undue pessimism as to the value of this treatment", but stress the need for more careful selection of subjects for therapeutic trial.

In spite of adverse criticism of the endocrine theory and the doubtful and contradictory results obtained, R. Sessions Hodge reported in 1950[3] the results of treatment in 15 experimental cases by oestrone, the female sex hormone which modifies sexual impulse by suppressing pituitary function. The effect can be graded and reversible by giving testosterone, the male sex hormone. The occupation of these subjects varied from heavy industry to professionalism and the IQs ranged from dull (IQ 85) to superior. The types of cases included both homosexual and heterosexual offenders, all of whom "agreed that they experienced a feeling of relief and release from an all-pervading difficulty." Sessions Hodge claims that this treatment is "a method of selective suppression of a basic instinctual drive - to wit the diminution or suppression of sexual feeling in man." Controlled dosage had averted feminisation, but the suppression of feeling could be "total" where desired and "appreciation" of sex could be obliterated so that stimulation did not effect arousal, thus causing the homosexual and the heterosexual alike to lose their "appetite". Trial treatment on one or two female cases, however, had proved ineffective, the cases having been "unrelieved if not made worse."

Although the glands of internal secretion have had claimed for them the major rôle in all human activities, and although it is an unquestionable

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[1] Clifford A. Wright, Results of Endocrine Treatment in a Controlled Group of Homosexual Men, Med. Rec., 154:2, Jul. 1941, pp. 60 - 61.

[2] S. J. Glass and Roswell H. Johnson, Limitations and Complications of Organotherapy in Male Homosexuality, J. Clin. Endocrin., 4:11, Nov. 1944, pp. 540 - 544.

[3] R. Sessions Hodge, Medico-legal Aspects of the Treatment of the Sexual Offender, Medicolegal J., 18:4, 1950, pp. 130 - 144.

fact that the endocrines do play a part in bodily, mental and emotional development, just as do other organ systems like the nervous and cardiovascular systems, Carmichael[1] points out that it does not seem likely that all or any one of them plays the major part since human behaviour, normal or abnormal, is probably determined by multiple factors including hereditary background, external environment and internal environment. Kinsey[2] emphasises that obvious factors in determining the pattern of behaviour of an individual are the circumstances of the first sexual experience, psychic conditioning and social pressures; but whilst he does not deny the possibility that endocrines are involved in homosexual activity, he suggests that in order to demonstrate this, "it would be necessary to show a correlative variation in hormones and behaviour which includes such gradations, combined patterns and changes of pattern" as occur in many homosexuals. He brings forward the powerful argument that "any hormonal or other explanation of the homosexual must allow for the fact that bisexual, homosexual and heterosexual activities may occur coincidentally in a single period in the life of a single individual, and that exclusive activities of any one type may be exchanged, in the brief span of a few days or a few weeks, for an exclusive pattern of the other type, or into a combination pattern which embraces the two types."

These exceedingly marked variations in the degree of bisexuality in man are, according to Myerson and Neustadt[3], more easily understood "if we consider that sex hormone formation is not the function of one single gland, but dependent upon the proper inter-relationship in time and function of a great many glands and organs and of psychic factors." The complicated hormonic system concerned with the formation of sex hormones is in harmonic balance under ideal conditions which may, however, be disturbed from any one point in this system. They state[4] that "the amount of androgens in the body is mainly responsible for the strength and vigour of the sex drive of the individual, while the absolute and proportionate amount of estrogens determine its general direction." If homosexuality is predominately a disproportion in the androgen-estrogen ratio, of which there is no evidence of production before the tenth year of life[5], it becomes difficult to explain satisfactorily the feminine interests and attitudes for years before the advent of puberty in 18 of the homosexuals studied by Jonas.

In spite of the first optimistic reports on hormone assays of the

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[1]Carmichael, Op. Cit., p. 205. [2]Kinsey, Op. Cit., p. 428.

[3], [4]Myerson and Neustadt, Op. Cit., pp. 939, 955.

[5]Carl H. Jonas, Op. Cit., p. 635.

urine of male homosexuals, the present general opinion seems to be that there is so far little evidence upon which reliance can be placed that there is any endocrine difference between 'normal' and homosexual. Allen concedes that the endocrine factor may be ancillary but denies that it is the basic cause[1]. Bergler[2] states that "endocrinology has nothing therapeutic to contribute to the problem of homosexuality." Ford and Beach[3] reject any exclusively physiological explanation for homosexuality, including the abnormal glandular balance theory, on the grounds of cross-cultural evidence; they quote as an example the Siwans of Africa, a society in which the majority of males engage in homosexual relations. Kinsey[4] criticises the results of Glass, Devel and Wright[5] as being statistically unsound and the standard errors in their small number of cases being too great for their results to be conclusive; further that their technique was faulty, and finally that the methods of sampling were erroneous and led to wrong conclusions. The matter would appear to be summed up by Ford and Beach and by Kinsey et al when they emphasise that the fundamental error in hormone therapy is the unjustified assumption that gonadal hormones determine the character of the sexual drive in human beings[6]. The hormones may affect the capacity of the central nervous system to be stimulated sexually, and within limits the levels of sexual response may be modified by reducing or increasing the amount of available hormone, but "there appears to be no reason for believing that the patterns of sexual behaviour may be modified by hormonal therapy."[7]

## 6. Perversion (Degeneracy).

Of the early writers on the subject, Krafft-Ebing was of the opinion that homosexuality was a sign of degeneration. He says[8], "Since ... the individual tainted with inverted sexual instinct displays a neuropathic predisposition in several directions, and the latter may be brought into relation with hereditary degenerate conditions, this anomaly of psychosexual feeling may be called, clinically, a functional sign of degeneration." Later[9] he adds, "and as a partial manifestation of a neuro-(psycho-)pathic

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[1] Allen, Op. Cit., p. 119.

[2] Bergler, Psychiat. Quar. 1948, Op. Cit., p. 85.

[3] Ford and Beach, Op. Cit., p. 132.

[4] Kinsey, 1941, Op. Cit., quoted by Allen, 1949, Ibid, p. 117.

[5] Glass, Devel and Wright, Op. Cit., pp. 590 - 594.

[6] Ford and Beach, Ibid, p. 236. [7] Kinsey et al, 1953, Op. Cit., p. 761.

[8], [9] Krafft-Ebing, Op. Cit., pp. 272, 326.

state." In support of this he makes the following points:

(a) The sexual life is manifested abnormally early, and thereafter with abnormal power.

(b) Psychical love is often exaggerated and exalted.

(c) Other functional and/or anatomical evidences of degeneration are present.

(d) Neuroses co-exist (hysteria, neurasthenia, epileptoid states, etc.).

(e) There are psychical anomalies in the majority of cases ("brilliant endowment in art, especially music, poetry, etc., by the side of bad intellectual powers or original eccentricity") even to mental degeneration ("pathological emotional states, periodical insanity, paranoia, etc.").

(f) There are neuroses, psychoses, degenerative signs in the families.

Since 1899, opinion has undergone a change and the homosexual is no longer regarded as a degenerate or necessarily of degenerate stock. Many of our current psychiatric classifications, including that of Henderson[1], would place homosexual individuals among the psychopaths. The egocentricity, promiscuity and incapacity for normal adult love of the psychopath is regarded as evidence of immaturity in psychosexual development, and the psychopath is therefore considered to be essentially homosexual. Being poorly anchored in sexual adjustment, it is not unusual for a psychopath to practise overt homosexuality, but Campbell[2] points out that the homosexual individual is basically different from the psychopathic personality, particularly in emotional reactions and in conscience, or ability to acquire moral standards. He adds further, "Except for his sexual inversion and the reactions which occur secondary to that deviation, the homosexual is not greatly different from normal persons. Degeneracy ... is not found in the true homosexual... Furthermore it can be safely stated that the families of inverts are an average, normal cross-section of the population and could not be called degenerate stock."

This opinion is shared by Lief[3] in these words: "It evidently is wrong to class it" (homosexuality) "merely as degeneracy. It occurs in normal individuals, even with specially high intellectual and ethical standards." Stanley-Jones is emphatic in his statement, "There is no question, in the

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[1] Henderson and Gillespie, 1936, quoted by Campbell, Op. Cit., p. 67.

[2] Campbell, Ibid, pp. 44, 183.

[3] Alfred Lief, The Commonsense Psychiatry of Dr. Adolf Meyer, N.Y., McGraw Hill Book Co. Inc., 1948, p. 262.

majority of cases of homosexuality, of endocrine dysfunction, the 'female soul in a male body', still less of any streak of moral delinquency or inborn vice."[1]

Other Theories.

A review of the literature on homosexuality provides one with a variety of opinions and deductions, some of which have been briefly summed up by Campbell as follows[2]:

(a) Westphal (1870) : homosexuality is neither vice nor insanity, and is congenital rather than acquired.

(b) Krafft-Ebing (1893) : there are both congenital and acquired cases; he classified the homosexual with either the psychopathic personality or as a neurotic.

(c) Freud : evolved theories of psychosexual development and bisexuality; recognised a constitutional defect, but looked to the unconscious for a solution of this 'neuroticism'.

(d) Adler : homosexuality is an expression of the neurotic constitution.

(e) Bleuler : homosexuality is probably constitutional; but he confused it with psychoneuroses.

(f) Hirschfeld (1914) : the homosexual is normal in every respect except the sex drive.

(g) Diefendorf : homosexuality is a manifestation of psychopathic personality which is congenital because it reflects degeneracy.

(h) Noyes (1931) : the homosexual is a sexual psychopath.

(i) Havelock Ellis : the homosexual is healthy and normal in all respects outside the special aberration, but is frequently in close relation to minor neurotic conditions.

(j) Wilson and Pescor (working on prisoners) : stressed the importance of hormonic influence, hence a predisposition to constitutional homosexuality.

(k) Green and Johnson (also working on prisoners) : a delinquent whose maladjustment is in part homosexual.

(l) Greenspan and Campbell (working in a military institution) : a constitutional endocrine disturbance; the homosexual is neither psychotic, psychopathic, neurotic nor a criminal, but constitutes a distinct personality type.

This list, of course, does not cover all shades of opinion, but it may be seen that different disciplines have found different explanations for and descriptions of the phenomenon of homosexuality. Many believe that there must be some one basic explanation for such departures from the code, whereas others favour the theory that the causative factors are multiple and diverse. Among the former may be quoted Bergler who states[3], "The fact remains that to-day

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[1] Stanley-Jones, Op. Cit., pp. 366 - 369. [2] Campbell, Op. Cit., p. 171.

[3] Bergler, Psychiat. Quar., 1948, Op. Cit., p. 85.

homosexuality is a curable neurotic disease, requiring specific therapeutic techniques and prerequisites." He insists that "all attempts to prove homosexuality to be anything but illness have, in my opinion, failed,"[1] and dismisses other explanations in the following words: "Homosexuals have always found their unwitting apologists. First the biological bubble was promoted, then pity was invoked, then historical parallels were put to work. The historical gambit is based on quite incomplete reports that in some ancient cultures (e.g. Greece) homosexuality was considered an accepted fact. The latest is Kinsey, who in his Report speaks of a 'homosexual-heterosexual balance'."[2] Another example of a presumed single factor is to be found in Owensby's report on the treatment of one female and five male homosexuals by metrazol in various undisclosed institutions. His reasoning is as follows: "Investigations were based on the assumption that homosexuality and lesbianism are symptoms of an under-developed schizophrenia which was arrested at the particular phase in its psychosexual development where the libido became fixated and that metrazol liberates this previous fixation of the libido and the psychosexual energy becomes free once more to flow through regular physiological channels."[3]

A single emotion has sometimes been put forward as the basic cause of homosexuality. In connection with lesbianism, for example, Freed[4] says that it is "the line of lesser resistance to the achievement of a sense of psychological balance, of well-being, and security. She" (the lesbian) "avoids the heterosexual objective, because she has been frustrated, or feels she is likely to be frustrated in the pursuit thereof." Very similar is the suggestion put forward by Kinsey et al[5] that "there are some males whose homosexuality is undoubtedly the product of inherent or acquired timidity or other personality traits which make it difficult for them to approach other persons for any sort of social contact." In refuting the general misuse of the term "bisexual", which he considers to be biologically illegitimate, Rado points out that the common denominator in all clinical pictures of genital psychopathology is that they represent abnormal conditions of stimulation, and that the basic problem is "to determine the factors that cause the individual to apply aberrant forms of stimulation to his standard genital equipment." He suggests that "the chief causal factor is the affect of anxiety, which inhibits standard stimulation and compels the 'ego action system in the

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[1], [2] Bergler, Neurotic Counterfeit Sex, 1951, Op. Cit., pp. 191, 192.

[3] Newdigate M. Owensby, Homosexuality and Lesbianism Treated with Metrazol, J. Ner. Ment. Dis., 92:1, Jul. 1940, pp. 65 - 66.

[4] Freed, Op. Cit., p. 61.

[5] Kinsey et al, 1948, Op. Cit., p. 633.

individual' to bring forth an altered scheme of stimulation as a 'reparative adjustment'." If constitutional factors may be assumed to have an influence on morbid sex developments, he adds, then this influence may justifiably be considered to be of two kinds: "one preparing the ground for the inhibitory action of anxiety, the other modulating the course of the reparative adjustment."[1]

In their investigations, Kinsey et al found that there was a higher incidence of homosexual experiences amongst males in whom the onset of adolescence occurred early, and they suggest that "as a factor in the development of the homosexual, age of onset of adolescence (which probably means the metabolic drive of the individual) may prove to be more significant than the much discussed Œdipus relation of Freudian philosophy."[2]

Gallichan[3] commented in 1916 on the "marked development of inverted forms of sexuality, amazing perversions, and the spread of venereal diseases" and noted that celibacy and pseudo-celibacy were caused and enforced by the state of society which makes marriage difficult of attainment. The findings of Kinsey et al indicate that there has, in fact, been no appreciable increase in the incidence of homosexuality, but they too suggest that "restraints on pre-marital heterosexual contacts appear to be primary factors in the development of homosexual activities among both females and males."

Investigations have shown that there are often more specific environmental factors common to many homosexual histories. Prominent among these is the seduction of good-looking youths by homosexual men, which has been commented on by Norwood East[5] and by Taylor[6]. The early home environment is regarded as particularly important and has been stressed by Allen[7], by Henry, who makes the parents "in most instances chiefly responsible for the homosexual development in their children"[8], and by Karpman, who also blames the parents themselves and the unwholesome family and social atmosphere in which the child develops[9]. Landis et al found that "those individuals who experienced sex aggressions before puberty were more apt to have guilt feelings connected with all heterosexual relations or to give evidence of a definite homoerotic trend" and that "those individuals whose early home life had lacked

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[1]Rado, Op. Cit., pp. 466 - 467. [2]Kinsey et al, 1948, Op. Cit., p. 315.

[3]W. M. Gallichan, The Great Unmarried, London, T. Werner Laurie Ltd., 1916, p. 129.

[4]Kinsey et al, 1953, Op. Cit., p. 14. [5]Norwood East, Op. Cit., p. 665.

[6]Taylor, Op. Cit., pp. 525 - 529. [7]Clifford Allen, B. M. J., Op. Cit.

[8]Henry, 1937, Op. Cit., p. 902.

[9]Benjamin Karpman, The Sexual Psychopath, J. Crim. Law, Criminol. and Police Science, 42:2, Jul. - Aug. 1951, pp. 184 - 198.

security or emotional stability had poor general adjustment in adult life, had more guilt over sexual experience, and had less contact with men."[1] Bender and Grugett[2] conducted a follow-up study of children who had had an abnormal early home life; some had been sexually involved with a parent, whilst others had either been emotionally involved or had suffered parental deprivation. They concluded tentatively that overt sexual behaviour in childhood did not necessarily forecast their retention into adult life or maladjustments specifically rooted in such experience. The group of children emotionally involved with a parent comprised some with a domineering homosexual parent of the same sex, with the parent of the opposite sex inadequate or absent, and some with hatred or fear of the same-sex parent, or this parent ineffectual or absent; this group showed homosexual personality and activities with neurotic symptoms. The third group, who had suffered parental deprivation during infancy, or delayed identification with a parent substitute of the opposite sex, showed many psychopathic personality traits, particularly schizophrenia; they did not develop homosexual personality patterns although there were general social and emotional adjustment problems. From this study, it would appear that the child's early home environment is important in the development of personality, and that emotional involvement with a parent might in some way be connected with the development of homosexual tendencies.

More recent studies of homosexuality have supported Hirschfeld's claim in 1899 that it is a "biological phenomenon of universal extension",[3] and have sought a wider explanation than in terms of individual causes. Clifford Allen[4], for example, maintains that these perversions are the product of incomplete development, both phylogenetically and ontogenetically; they are reminiscences both of the racial and individual growth, and those who are completely developed have no interest in them. From cross-cultural and cross-species comparisons made by Ford and Beach, they suggest that a biological tendency for inversion of sexual behaviour is inherent in most if not all mammals including the human species. Since, however, it is never the predominant type of sexual activity for adults in any society or in any animal species, they postulate that it is "the product of the fundamental mammalian heritage of general sexual responsiveness as modified under the impact of experience."[5]

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[1] Landis et al, Op. Cit., p. 200.

[2] Lauretta Bender and Alvin Eldridge Grugett Jnr., A Follow-up Report on Children who had Atypical Sexual Experience, Am. J. Orthopsychiat., 22:4, 1952, pp. 825 - 837.

[3] Quoted by Ellis, Op. Cit., p. 24. [4] Allen, 1949, Op. Cit., p. 33.

[5] Ford and Beach, Op. Cit., p. 259.

Of the authors who believe that homosexuality is not due to any single factor, many have attempted to draw up different classifications. Bowman[1], for example, says that the causes of sexual maladjustment depend on three things: the constitutional make-up of the individual (both physical and mental), the culture in which he lives, and special conditioning experiences which may produce special attitudes and sensitivities.

Loeser[2] describes "four main sub-groups of homosexuals, viz. (1) Endocrine - or constitutional, determined by glandular dysfunction, approximately 30%. (2) Psychological - or environmentally determined by factors at work during the formative stage of psychosexual development. (3) Regressive - the compulsive-obsessional group who are blocked in normal heterosexual function by obsessional reactions of inadequacy and turn to homosexuality as an outlet. (4) Facultative - the psychopath group who may function either as homosexuals or heterosexuals, depending upon circumstances, surroundings and opportunity."

The great diversity of factors, or combination of factors, which may account in different individuals for their departure from social customs, have been classified by Hoch and Zubin under four heads as follows[3]: "First, there are factors in the animal's immediate environment. Second, there is the past experience of the animal which through processes of conditioning, may lead it to react to present circumstances in terms of its previous experience. Third, the individual's individual inheritance may account for some of the similarities and differences between its behaviour and the behaviour of other individuals in the same species. Fourth, the behaviour of each species may reflect the long-range phylogenetic inheritance of the biological group to which it belongs." Any sort of behaviour, they point out, may be the product of a conjunction of factors from all of these four areas. They give[4] three discernible causes which may prompt an individual to develop mechanisms of orgastic arousal involving the same sex, viz: hidden but incapacitating fears of the opposite sex; situational inaccessibility of the opposite sex; and desire for surplus variation. In the opinion of most authors, however, homosexual responses due to the last two causes would not constitute "true" homosexuality, although they emphasise the potential for such activity in many human beings.

Henry, who considers the sex variant to be a person who has remained at an immature level of sexual adjustment, gives the reasons for his not

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[1]Karl M. Bowman, Contribution to Symposium, The Challenge of Sex Offenders : Psychiatric Aspects of the Problem, Mental Hygiene, 22:1, Jan. 1938, pp. 1 - 24

[2]Lewis H. Loeser, The Sexual Psychopath in the Military Service, Am. J. of Psychiatry, 102, Jul. 1945, pp. 92 - 101

[3], [4]Hoch and Zubin, Op. Cit., pp. 19, 187.

having developed beyond this level as (a) constitutional deficiencies, (b) the influence of family patterns of sexual adjustment, and (c) lack of opportunities for psychosexual development.[1] The "constitutional deficiencies" he lists as structural, physiological and psychological, the first being the least evident, and the last the most readily demonstrated.

Kinsey et al voice their disagreement with many of the theories put forward, and make their own contribution towards the ætiology of homosexuality in the following passage[2]:

> "There is no need of hypothesising peculiar hormonal factors that make certain individuals especially liable to engage in homosexual activity, and we know of no data which prove the existence of such hormonal factors. There are no sufficient data to show that specific hereditary factors are involved. Theories of childhood attachments to one of the other parent, theories of fixation at some infantile level of sexual development, interpretations of homosexuality as neurotic or psychopathic behaviour or moral degeneracy, and other philosophic interpretations are not supported by scientific research, and are contrary to the specific data on our series of female and male histories. The data indicate that the factors leading to homosexual behaviour are (1) the basic physiologic capacity of every mammal to respond to any sufficient stimulus; (2) the accident which leads the individual into his or her first sexual experience with a person of the same sex; (3) the conditioning effects of such experience; and (4) the indirect but powerful conditioning which the opinions of other persons and the social codes may have on an individual's decision to accept or reject this type of sexual contact."

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[1] George W. Henry, Sex Variants, London, Cassell and Co. Ltd., 1950, p. 1023.

[2] Kinsey et al, 1953, Op. Cit., p. 447.

## OTHER THEORIES RELATING TO HOMOSEXUALITY.

### 1. Personality and Temperament.

At about the same time that Benkert was emphasising that homosexuality is "congenital and unconquerable", Carl Westphal reached the conclusion that in cases of sexual abnormality it is the entire mentality that is involved, and not only the sexual impulse as such. Ulrichs failed to convince the world, and particularly the experts, that homosexuality was not merely a sexual quality but also a matter of psychological make-up which determined all physical acts, although after him Krafft-Ebing adopted the same view and more recent investigators now also support this theory. Hirschfeld believed that "genuine homosexuality only exists where the physical acts are an outcome of homosexual mentality."[1] He says, "The homosexual must be considered not only in the light of his sexuality but in the light of his individuality as a whole. His sexual inclinations and aversions are only symptoms, secondary concomitants; the primary thing is his psyche and his make-up as a whole."[2]

A major hypothesis of present-day psychological theory is that the course of psychosexual development of the individual is a most important element in the development and structure of his total personality, although Landis et al do not agree with this viewpoint. They say[3]: "Psychologists hold that it is logically almost impossible to regard sex as the basic element of personality or as a motivating factor in isolation. A life is not simply a variation of a uniform pattern of sexuality but, on the contrary, the sexuality of a life can be understood only if it is regarded as one of the variations within the total and complete pattern of personality." Hence they conclude "that personality structure is more fundamental than the psychosexual history, that personality determines this history (style of life) rather than that the psychosexual history forms or determines the personality."[4] Bowman stresses that it is important to keep in mind that the sex life of an individual is merely one aspect of his total personality and is closely interwoven with all other aspects of his personality. It cannot be studied with value as an isolated phenomenon, apart from the rest of the personality and the culture in which the individual lives.

It is quite commonly believed that an individual's preference for a sexual partner of one or the other sex is correlated with certain physical

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[1], [2] Hirschfeld, Op. Cit., pp. 227, 275.

[3], [4] Landis et al, Op. Cit., pp. 197, 205.

[5] Bowman, Mental Hygiene, Op. Cit., p. 12.

and mental qualities, and with the total personality which makes a homosexual person in some way distinct from a heterosexual person. Even psychiatrists discuss the "homosexual personality". Greenspan and Campbell[1] contend that the homosexual is an exclusive personality type, clearly different from the psychiatric disorders under which it has frequently been catalogued; they claim that the homosexual personality is a psychopathologic type, and not simply a normal individual who has been exposed to such practices. Sessions Hodge agrees that the great majority of homosexuals are "true deviants from the heterosexual pattern in whom there has been from an early age this deviation."[2] In a series of 79 homosexual offenders, Norwood East found that "the complicated pattern of behaviour suggested a personality factor"[3], whilst Jonas submits that homosexuality is "a manifestation of poor personality integration" which "from the ætiological standpoint should be considered in a similar category to excessive masturbation and chronic alcoholism."[4] Kinsey et al state, however, that it is disagreements over the significance of sexual behaviour which may result in personality conflicts[5], whilst Krafft-Ebing maintained that in homosexual individuals "there are here present, ab origine, sexual desires and inclinations for persons of the same sex exclusively; but ... the anomaly is limited to the vita sexualis, and does not more deeply and seriously affect character and mental personality."[6]

Whether the personality determines the psychosexual history or vice versa, or whether conflicts over sexual behaviour result in personality disturbances, or whether in fact there are personality disturbances seems to be a matter of opinion. That there does appear to be a "typical" personality common to the majority of homosexuals is not in very great dispute, although Smith[7] does not agree with this. In a study of 100 male homosexual prisoners he found the members of this group not to exhibit consistently any personality traits which served to distinguish them from their undeviated fellows. He reports, "Although many homosexuals are artistically inclined, this is certainly not true of the whole group. Neither can it be said that they are uniformly intelligent or 'sensitive'. On the contrary ... they comprise rather a heterogeneous group of personality types exhibiting all kinds of psychopathology."

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[1]Greenspan and Campbell, Op. Cit., p. 682. [2]Sessions Hodge, Op. Cit., p. 133.

[3]Norwood East, The Sociological Aspects of Homosexuality, Medicolegal and Criminol. Rev., 15:1, 1947, p. 11.

[4]Jonas, Op. Cit., p. 640. [5]Kinsey et al, 1948, Op. Cit., p. 385.

[6]Krafft-Ebing, Op. Cit., p. 357.

[7]Charles E. Smith, The Homosexual Federal Offender, J. Crim. Law, Criminol. and Police Science, 44:5, Jan.-Feb. 1954, pp. 582 - 591.

Generally, in homosexual men the evidence of psychopathological phenomena is said to include general personality distortion with a prevalence of schizoid or schizo-sexual disorganisation as well as the 'obsessive' feature of insistence on pregenital or paragenital gratification patterns.[1] Their personality is said to be deeply disturbed and their behaviour often associated with other perversions; they may manifest deep-seated anxiety, fear of castration, feeling of weakness of the ego, and incapacity for love; "the sense of reality may be insufficiently developed, so that there is a presence of schizoid withdrawal and unusual narcissism. A rich set of reactive hyper-compensations adds to homosexual characterology."[2]

More specifically, the following descriptions have been given:

Havelock Ellis[3]: Inverted women may retain their feminine emotionality combined with some degree of infantile impulsiveness and masculine energy, hence the greater possibility of their being involved in 'crimes passionnelles'. "A moral quality very often associated with dramatic aptitude, also with minor degrees of nervous degeneration, is vanity and love of applause."

Kahn[4]: "The personal histories of the homosexual show that they are emotionally unstable, that they are constantly in difficulties and obsessed with conflicts, that they wander from place to place and that some of them are homosexual purely for passion's sake. Others are greatly influenced by the financial compensation for such acts. It seems that the majority of criminal homosexuals after reaching penal institutions (especially females), are drug addicts."

Maslow[5]: Among the cases in the highest bracket of high dominance-feeling, or ego-level, promiscuity, masturbation, homosexual experiences and perversions of all sorts were found. "Our high dominance women feel more akin to men than to women in tastes, attitudes, prejudices, aptitudes, philosophy, and inner personality in general... They tend to like gambling, drinking, smoking, and dangerous sports." "The love of adventure, new experience, novel and new ideas is seen more often in high than in low dominance people."

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[1] Kallmann, J. Ner. Ment. Dis., 1952, Op. Cit., p. 285. See also pp. 56 - 68.

[2] Hoch and Zubin, Op. Cit., p. 192.

[3] Ellis, Op. Cit., pp. 201, 297.

[4] Kahn, Op. Cit., p. 43.

[5] A. H. Maslow, Dominance, Personality and Social Behaviour in Women, J. Soc. Psychol., 10:1, Feb. 1939, pp. 3 - 39.

Greenspan and Campbell[1]: (The homosexual personality) "Evidence of his homosexual constitution is found in his hobbies, artistic interests, pseudo-sophistry, feeling of intellectual superiority and pursuit of a career Aesthetic interests in art, music, literature, the theatre, etc., are particularly common... Many dabble in poetry, art, sculpture and drama." "Associated with these abstract inclinations is an intellectual superiority which is probably a compensatory mechanism, behind which the homosexual barricades himself from a hostile society. An egocentric, subtle, satirical attitude is developed toward what he considers to be a shallow-minded world... Much of their thinking is pseudo-philosophical, blasé, ultra-sophisticated and ethereal."

Cory[2]: "Most homosexuals have a highly-developed cunning, an ability to grapple with difficult situations in a sly manner, to improvise, think quickly, react on the spur of the moment." "The use of the lie is literally forced upon the pretending homosexual and as a result he often develops a contempt for the truth, an inability to distinguish between fact and fiction, between reality and pretence, a predilection for extending the lie to other phases of his life, a justification of falsehood as a tool in the struggle for living. His entire life seems motivated by restlessness and characterised by rootlessness."

Bergler[3]: Mentions the amount of conflict and of jealousy between homosexuals which "surpasses everything known even in bad heterosexual relationships"; and also[4] "the amazing degree of unreliability of homosexuals - the combination they show with psychopathic trends" (which he quotes as "one of the end results of the masochistic elaboration of the oral trauma."). He also states[5], "The truly megalomaniacal superciliousness of homosexuals is unique... They recover only partially from the defeat of weaning, and even then only with narcissistic recompense."

Henry and Gross[6] divide the underprivileged homosexuals into three types - "the orderly homosexual, the exhibitionist fairy, and the hoodlum." (1) The orderly homosexual "must make some sort of compromise with the external world, and he constantly seeks to conceal his homosexuality from outsiders. These men seldom 'let their hair down' to strangers, but do so in the company of those whom they feel they can trust. These homosexuals are haunted by a

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[1]Greenspan and Campbell, Op. Cit., p. 682. [2]Cory, Op. Cit., pp. 97 - 98.

[3]Bergler, Neurotic Counterfeit Sex, Op. Cit., p. 193.

[4], [5]Bergler, Psychiat. Quar., 1948, Op. Cit., p. 72.

[6]George W. Henry and Alfred A. Gross, Social Factors in the Case Histories of 100 Underprivileged Homosexuals, Ment. Hyg., 22:1, Oct. 1938, pp. 591 - 611.

constant fear of the police and the blackmailer." "Man after man, on being interviewed, will report that it is the thrill of the chase, rather than the sex act itself, which so exigently drives him to taking unbelievable chances. Many have had hair-breadth escapes from the law or the blackmailer, they have been beaten and robbed; and yet they persist in exposing themselves to situations that seem dangerous beyond calculation... And this despite the fact that homosexuals are otherwise notoriously timid souls."[1] (2) The exhibitionist fairy cares little or nothing for the blackmailer, and he claims not to care much more for the police." He has nothing to lose, and his attitude is much like that of the female prostitute. (3) The homosexual hoodlum makes prostitution his profession but denies homosexuality. He loudly protests his masculinity, and beats and/or robs his clients. He is referred to as "rough trade" and "must be regarded as a member of the criminal class." "Most homosexuals in this" (underprivileged) "group seem to regard sex crimes against children with varying degrees of abhorrence... The group is essentially youthful... The elderly homosexual is a phenomenon more likely to be encountered in the socially superior group... What becomes of the elderly homosexual on this level is something of a mystery. Either he gravitates down to the Bowery level, or his difficulties become so acute that he ends in a mental hospital or a penal institution."

Homosexuals generally are reputed to lack the ability to love in the usually accepted sense of the word. Freudian psychiatrists agree that many, if not all homosexuals represent in terms of personality an arrested love development.[2] Brancale, Ellis and Doorbar[3] report that "high rates of severe emotional immaturity were found among all types of convicted sex offenders examined, with 91% of the subjects proving to be distinctly emotionally immature." Campbell, however, does not altogether agree with this; he says: "The homosexual is patient, enduring and long-suffering in his emotional

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[1] This may be compared with Oscar Wilde's reference to his own activities as reported in "Trials of Oscar Wilde", H. Montgomery Hyde (Ed.), London, Wm. Hodge and Co. Ltd., 1948. "People thought it dreadful of me to have entertained at dinner the evil things of life, and to have found pleasure in their company. But then, from the point of view through which I, as an artist in life, approach them, they were delightfully suggestive and stimulating. It was like feasting with panthers; the danger was half the excitement. I used to feel as a snake charmer must feel when he lures the cobra to stir from the painted cloth or reed basket that holds it and makes it spread its hood at his bidding and sway to and fro in the air as a plant sways restfully in a stream. They were to me the brightest of gilded snakes, their poison was part of their perfection."

[2] Kimball Young, Op. Cit., p. 582.

[3] Ralph Brancale, Albert Ellis and Ruth R. Doorbar, Psychiatric and Psychological Investigations of Convicted Sex Offenders, Am. J. Psychiat., 109:1, Jul. 1952, pp. 17 - 21.

reaction, traits which suggest his biological kinship to woman, and conspicuously opposite to those of the psychopathic personality. Like the female, the invert is sensitive to criticism, desires approval, and has a normal degree of emotional feeling." "This personality type is capable of respect, affection, idealism, worship and 'love', even though this may be considered on a narcissistic level."[1]

Many of the character traits given above may be equally applicable to heterosexual individuals, but at the same time there does appear to be common agreement on some points of the personality profile of homosexuals. The most notable of these are the presence of schizoid characteristics, narcissism, emotional instability and artistic interests. These points will be investigated in the test group at present being studied.

2. Masculinity-Femininity.

The concepts of masculinity and femininity are largely culturally determined; our culture has decided that certain traits are masculine or feminine, and people govern themselves accordingly. There seems to be no justification for considering masculinity or femininity a unitary trait. Carpenter pointed out, almost half a century ago, that the two sexes represent the two poles of one group, the human race, and adds[2], "While certainly the extreme specimens at either pole are vastly divergent, there are great numbers in the middle region who (though differing corporeally as men and women) are by emotion and temperament very near to each other." Slater and Slater[3] say, "There are in fact good reasons to think that the dichotomy into male and female is to some extent a matter of degree even in the anatomical field, and in the temperamental field still more so. The distinction of male or female must be regarded rather as a quantitative one, than as the sharply qualitative one we commonly consider it." Ford and Tyler[4] agree in these words: "Psychological masculinity and femininity ... has at least two dimensions for both sexes, representing emotional characteristics and interests respectively." No individual, according to Freud[5], is limited to the methods of reaction of

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[1] Campbell, Op. Cit., pp. 178 - 179.

[2] Carpenter, Op. Cit., p. 17.

[3] Eliot Slater and Patrick Slater, A Study in the Assessment of Homosexual Traits, Brit. J. Med. Psychol., 21:1, 1947, pp. 61 - 74.

[4] C. J. Ford, Junr., and L. E. Tyler, A Factor Analysis of Terman and Miles' Masculinity-Femininity Test, J. Applied Psychol., 36:4, Aug. 1952, pp. 251 - 253.

[5] Freud, Outline of Psychoanalysis, 1949, Op. Cit., pp. 55, 62.

a single sex but always finds some room for those of the opposite one. If a little girl, for example, adheres to her first wish - to grow into a boy - she will show markedly masculine traits in the conduct of her later life, will choose a masculine vocation and so on, and in extreme cases she will end as a manifest homosexual.

There seems to be little scientific basis for precise classification of human beings as masculine or feminine. Masculinity and femininity are quantitative and qualitative variations which are registered in structural, physiological and psychological attributes peculiar to each individual. "Regardless of the sex," says Henry,[1] "a person gives expression to masculine or feminine traits in accordance with his innate tendencies to maleness and femaleness and in proportion to the opportunities for expression of these tendencies."

Masculinity in our culture has usually been equated with dominance and aggression, and femininity with subordination and passivity; but according to Maslow, "the sexual behaviour of a dominant animal is always masculine, and masculinity may be independent of the genetic sex of the individual. Subordinate individuals, in contrast, customarily show feminine mating behaviour regardless of their biological sex."[2] It appears, then, that dominance and masculinity are almost synonymous, whereas masculine and male are not; in other words, aggressiveness and passivity are not necessarily linked with the sex of an individual, but may be imposed by the individual's culture, as Mead has shown.

Maslow investigated dominance in women, defining dominance-feeling (or ego-level) as an evaluation of the self. He states[3], "High dominance feeling empirically involves good self-confidence, self-assurance, high evaluation of the self, feelings of general capability or superiority, and lack of shyness, timidity, self-consciousness or embarrassment." It appears, therefore, that dominance, although considered a masculine trait, is not necessarily restricted to the male, although Deutsch claims that a too-dominant woman in our culture may become a danger. She argues[4]: "It seems that when woman's activity goes beyond a definite degree of intensity, it is accompanied by forces that inhibit the activity of the persons in her entourage and thus becomes dangerous especially for the male members of the family." She feels that if we assume that man and woman originate in a common primeval source, then we must conclude that, in the psychic economy of the individual,

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[1] Henry, Sex Variants, 1950, Op. Cit., p. xii.

[2] Ford and Beach, Op. Cit., p. 137, [3] Maslow, Op. Cit., p. 3.

[4] Hélène Deutsch, Psychology of Women, 1946, Op. Cit., p. 225.

the two components, masculine and feminine, must be united to form a harmonious whole, the feminine component predominating in women and the masculine in men.

Clark[1] carried out a study of wanton destructiveness and found that "this study gives empirical support to the general idea that boys are more destructive than girls... The urge to destroy may be closely associated with the urge to create. If so, the greater destructiveness of boys over girls may be associated with the greater achievement of creativity of the male sex." This "urge to destroy" (and therefore to create) may be typical of the male sex in our culture, but it could be regarded more generally as being merely typical of masculinity and unrelated to sex.

According to our accepted standards of masculinity and femininity, Terman and Miles[2] have stated some of their findings as follows:

(a) Divorced women and unhappily married men rated more masculine than the other groups with which they were compared;

(b) the masculinity-femininity scores of athletes tend to be strongly masculine in both sexes, being especially marked in the case of women;

(c) the professional women rated more masculine than any other groups;

(d) the masculine college man is active and social; and the masculine college woman is intellectual and non-social;

(e) the masculine man has typically masculine (i.e. active) interests, such as science, mechanics, sport, travel; and the feminine man has cultural interests, such as art, religion, music, literature. The feminine woman has typically feminine interests, and the masculine woman has intellectual interests;

(f) 77 passive male homosexuals were far more feminine than any other male group studied. 46 Alcatraz active male homosexuals were significantly more masculine than the army group of roughly comparable ages, and much more masculine than the passive male homosexuals.

This report bears out the contention previously stated that masculinity and femininity are not always specifically related to male and female sex, even in our culture which trains a child from an early age to respond in ways regarded as being appropriate to its sex.

The picture conjured up in the minds of the majority of people when homosexuality is mentioned is of an exceedingly effeminate man, with the

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[1] Walter Houston Clark, Sex Differences and Motivation in the Urge to Destroy, J. Soc. Psychol., 36, Nov. 1952, pp. 167 - 177.

[2] Terman and Miles, Op. Cit., pp. 119, 121, 187, 217, 222, 242.

gestures, gait and manner of speech of a woman, or conversely of an exceedingly masculine woman with the habits, dress and voice of a man. That such homosexual types do exist is undeniable, but they are extreme types and are much less common than is generally believed to be the case. Hirschfeld remarked[1] that "the 'inverted woman' is more full of life, of enterprise, of practical energy, more aggressive, more heroic, more apt for adventure, than either the heterosexual woman or the homosexual man"; but he also observed that "in addition to this group of inverted women with masculine traits there is another group, 'not less large', of equally inverted women who are outwardly as thoroughly feminine as are normal women." Rado's comment[2] that "in some forms of homosexuality behaviour is in no way related to the behaviour of the opposite sex" is entirely in keeping with the statement of Kinsey et al, who say[3], "There are a great many males who remain as masculine, and a great many females who remain as feminine, in their attitudes and their approaches in homosexual relations, as the males or females who have nothing but heterosexual relations. Inversion and homosexuality are two distinct and not always correlated types of behaviour."

The existence of both masculine and feminine types of homosexuals in each sex is borne out by Henry[4] who administered Terman and Miles' Masculinity-Femininity test to a group of homosexuals. The scores of 26 men varied from plus 67 to minus 52, with a mean of plus 2.42, while those of the 21 women varied from plus 65 to minus 69, with a mean of minus 25.62. Of the group as a whole, therefore, the women tested well on the feminine side, and the men were just on the masculine side; 13 men, however, whose histories indicated outstanding passivity, varied from plus 52 to minus 52, with a mean of minus 16, indicating more than usual femininity in this group.

If the homosexual is to be regarded as a sexual psychopath, then according to Loeser's study of sexual psychopaths in the military service, they might be either the masculine or the feminine type. He considered[5], after careful study, that 53% of his group were masculine in make-up, temperament and mannerisms, and 47% were feminine. Physically, Smith[6] reports that 30% of his group of male homosexuals were considered to be effeminate in appearance and mannerisms, and the balance typically masculine.

Kimball Young suggests an endocrine basis for masculinity and

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[1] Quoted by Havelock Ellis, Op. Cit., p. 251.
[2] Rado, Op. Cit., p. 466.
[3] Kinsey et al, 1948, Op. Cit., p. 615.
[4] Henry, Sex Variants, 1950, Op. Cit., p. 1034.
[5] Loeser, Op. Cit., pp. 92 - 101.
[6] Smith, Op. Cit., p. 585.

femininity which may have some relation to the theory that homosexuality also depends on endocrine factors[1]. He says[2], "Modern physiology demonstrates that masculinity and femininity represent extremes on a distribution of characteristics which have much in common. In fact, men who tend to resemble the modal female physical habitus have apparently an endocrine balance resembling that of many women, and there are cases in which female endocrine-bearing tissue is found in males. Such constitutional foundations of possible emotional and temperamental divergence cannot be gainsaid."

Guilford and Martin equated sex differences with some emotional traits and found[3] intellectually superior women to be much more like men of the same mental age level than were women of lower intelligence. From this it should follow that homosexual women should be intellectually superior to other women of comparable age and educational standard. This point will be discussed later in connection with the group at present being studied. They also found that, for men, the higher the intellect, the more tendency there was toward depression, a trend that was not apparent in the women. In correlating general knowledge and intelligence, Inman[4] also found sex differences in a group of boys and girls as well as temperamental factors which influenced the scores on general knowledge. Throughout the age range studied (201 boys and girls from four different schools, ages from 12 to $15\frac{1}{2}$ years) she found boys to be much superior in general knowledge to girls of the same age. It will be seen from the present test group whether this result also applies to male and female adults. The "temperamental factors" which influenced Inman's results were presumed to have been caused by such things as extreme poverty, broken homes, etc., and she suggests therefore that the ill-adjusted child may be slow to acquire general knowledge. Whether he acquires it later or retains this lack of response to and interest in a wide range of interests, will also be seen from the group under present observation.

From the foregoing discussion, several points emerge, viz:

1. Masculinity and femininity should not be regarded as unitary traits, but rather as a composite of several.

2. The concepts of masculinity and femininity are very largely culturally determined.

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[1] Cf. pp. 30 - 35.

[2] Kimball Young, Op. Cit., p. 561.

[3] J. P. Guilford and Howard Martin, Age Differences and Sex Differences in some Introvertive and Emotional Traits, J. General Psychol., 31, 1944, pp. 219 - 229.

[4] Dorothea M. Inman, General Knowledge and Intelligence, Brit. J. Educ. Psychol., 9:1, Feb. 1939, pp. 72 - 87.

3. Homosexuals need not necessarily present characteristics of the opposite sex.

4. Sexual psychopaths may show a trend towards either masculinity or femininity.

5. Boys score better than girls on a test of general knowledge, which seems to be adversely affected by early home environment which is likely to lead to maladjustment.

3. Homosexuality and Intelligence.

Homosexuality is found in all strata of society, but investigations have usually been carried out among various institutionalised groups who have been regarded as typical. Any comments on the intelligence of homosexuals who are not in any institution have been largely speculative and based on a few individual cases. Greenspan and Campbell, for example, say[1], "The homosexual personality is usually intelligent, and frequently above the average," whilst Hirschfeld states that homosexuality occurs in persons whose capabilities are unaffected or who possess high intellectual and cultural attainments, and adds[2], "And it is undoubtedly true that some of the greatest men of whom we possess records were inverts, even absolute inverts." Freud also comments similarly[3]: "The inversion is found in people who otherwise show no marked deviation from the normal. It is found also in people whose mental capacities are not disturbed, who on the contrary are distinguished by especially high intellectual development and ethical culture." It is perhaps this knowledge of the comparatively few homosexuals who have achieved fame that leads Westwood to state that[4] "it is not unusual for homosexuals of all levels to believe that they are intellectually above average." By the same token, all heterosexual people could quote famous heterosexual men and women and claim to be intellectually above average by virtue of having heterosexuality in common with these people. In fact, of the 100 cases to be presented in this study, only a very few subjects (most of them being males) replied in the affirmative when asked if they considered that homosexuals as a group were more intelligent than other people. Others suggested that homosexuals were more artistic, more quick-witted, more ambitious, more versatile, more self-reliant, even more trustworthy, competent and conscientious; but they were not generally of the opinion that such a group of people was more intelligent than others.

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[1] Greenspan and Campbell, Op. Cit., p. 682.
[2] Hirschfeld, Op. Cit., p. 273.
[3] Freud (Ed. Brill), Op. Cit., p. 556.
[4] Westwood, Op. Cit., p. 130.

Of the homosexuals at the other end of the intellectual scale, Campbell comments[1] that it is occasionally noted in a feeble-minded individual, but is then usually more in the form of mimicry than as a passion. Krafft-Ebing believed that "perversions of the sexual instinct do not seem to occur at the lowest levels of mental development."[2]

Using the Stanford Revision Binet-Simon test, Kahn tested 75 cases in penal institutions and reports the average mental age to be 12 years, 6.89 months, ranging from $7\frac{1}{3}$ to $17\frac{1}{2}$ years. Regarding the intelligence he states[3]: "According to our tests, the average IQ of the homosexuals ranges around a scale of either the borderline or slightly above the borderline." The lowest IQ was 47 and the highest 100, the total average IQ being 77.81[4]. He thinks that they would have scored a much higher IQ if they had been less distractible and emotional, and he also points out that there are many homosexuals outside of penal institutions who would score higher ratings, since it is usually only those homosexuals with lower intelligence who become inmates of penal institutions. Even so, he states[5] that in general "the endowment and intelligence of the homosexuals in the penal institutions are somewhat higher than that of the non-homosexual inmates", and that this refers both to the males and the females. He concludes that although their IQs do not prove them to be definitely mentally defective, they are in a sense moral defectives.

Between these two classes, the intellectually superior and the borderline defective, lie, as with any population distribution, the majority of cases, although Havelock Ellis appears to believe that with homosexuals this majority must be neurotic. He makes the following statement[6]: "What may be regarded as true sexual inversion can be traced in Europe from the beginning of the Christian era ... especially among two classes - men of exceptional ability and criminals; and also, it may be added, among those neurotic and degenerate individuals who may be said to lie between these two classes, and on or over the borders of both." Ellis, however, seems to be in the minority here. The majority of writers on the subject either tend to the belief expressed by Kahn[7] that "there is neither a proneness toward nor an absence of mental defectiveness in homosexuality" and supported by Freud in these words[8], "The prevailing idea that all perverts are mental degenerates is not borne out by investigation. Nor is it true, as some claim, that most homosexuals are

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[1]Campbell, Op. Cit., p. 27.

[2]Krafft-Ebing, Op. Cit., p. 445.

[3]Kahn, Op. Cit., p. 106.

[4]His table on pages 36 - 38 gives the IQ range as 46 - 109.

[5]Kahn, Ibid, p. 101.

[6]Havelock Ellis, Op. Cit., p. 24.

[7]Kahn, Ibid, p. 25.

[8]Freud (Ed. Brill) Op. Cit., p. 18.

intellectual giants"; or they tend to believe that homosexuals on the whole are of average or slightly above average intelligence. Many of these beliefs are based on supposition.

In their case studies of 18 homosexual males, Terman and Miles found that the average school grade completed was the third year of high school, which is significantly above the mean for males of their generation in any part of the United States. From this they deduce that[1] "it is probable, therefore, that the group is also above the average of the general population in intelligence." Slater and Slater gave the Selective Vocabulary test to a group of 50 normal and 37 homosexual men, and found that the test differentiates between the two groups, the latter scoring significantly more on the masculine set of words; they conclude[2] that "it is quite likely, therefore, that homosexuals are more intelligent than normal men." Clifford Allen regrets the biological waste in homosexuality since so many desirable types fail to reproduce themselves; he makes the following comment[3]: "We do not subscribe to the view so often put forward by perverts themselves that genius is the product of perversion, but it must be admitted that sexual abnormalities do, in the main, occur in the more intellectual and artistic types whose abilities are so worth preserving in the future representatives of the race."

Some more scientific studies have been carried out on specific groups of homosexuals. On the Binet test administered to sexual psychopaths in military service, Loeser[4] found that only 9% had a mental age below 12 years, the figures being well above the average of the army; the A.G.C.T. ratings demonstrated "a preponderance of the more intelligent and capable, a preponderance of considerable degree when compared to the average normal distribution of army personnel." Campbell found that, although an occasional "true invert" in the military service had been found to have an IQ near 90, the majority of those examined "have been normal or above in this personality endowment." Reverting to supposition, however, he adds, "History accounts for numerous homosexuals who could be classified as geniuses, but as a general statement it is felt that the average invert is normal or above in his intellectual capacity." Darke and Geil[6] conducted a study on 100 male homosexuals selected from the population of the Medical Center for Federal Prisoners in Springfield, Missouri. The majority of these cases were given the Wechsler-Bellevue scale, and a few of the IQs were determined by means of the

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[1]Terman and Miles, Op. Cit., p. 318. [2]Slater and Slater, Op. Cit., p. 62.
[3]Clifford Allen, 1949, Op. Cit., p. 274. [4]Loeser, Op. Cit., pp. 92 - 101.
[5]Campbell, Op. Cit., pp. 173 - 174.
[6]Roy A. Darke and George A. Geil, Homosexual Activity, J. Ner. Ment. Dis., 108:3, Sept. 1948, pp. 217 - 240.

Otis Self-administering Test or the 1937 revision of the Stanford-Binet test. They divided the subjects into five groups according to degree of homosexual activity and preferred type of activity, and found the mean IQ of the group (which included two mental defectives who had been coerced into homosexual activities) to be 100.9, with no significant differences between the sub-groups. Comparing this group with the general population, therefore, they are of average intelligence; but the authors do not give details of the subjects' ages, types of occupation or educational background in order that they might be compared with a similar group. In addition, it does not seem feasible to compare IQs which have been arrived at through the application of different tests.

In the case of women, according to Terman and Miles[1] both superior intelligence and superior culture are associated with mental masculinity, the more masculine groups tending to be the better educated and the more intelligent. Havelock Ellis agrees[2], without stating his grounds for such belief, that "the congenital anomaly occurs with special frequency in women of high intelligence."

The general concensus of opinion seems to be that, as a group, homosexuals are of average or slightly above average intelligence when groups of prisoners and of army personnel are compared, or when they are considered in relation to the population as a whole.

The group to be reported on in this study is of 100 non-institutionalised homosexual men and women who will be compared with a control group of heterosexual people who are individually of the same age, the same educational standard (ranging from Standard VI to post-graduate degrees), and as nearly as possible the same type of occupation. The Wechsler-Bellevue test will be used exclusively so that any inconsistencies arising from the fact that the test is not yet standardised for South Africa will be equally distributed for both the test and the control groups. By this method of selecting control subjects, the results should not be affected if the group is predominantly of high or low education.

## 4. Homosexuality and Neurosis and/or Instability.

There is every reason to expect that the homosexual in our society might be neurotic, or at best not as well adjusted as his heterosexual fellows. From birth a child is faced by a mother and a father, each of whom presents a relatively distinct pattern of personality which is attractive by its own

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[1] Terman and Miles, Op. Cit., pp. 193 - 194. [2] Havelock Ellis, Op. Cit., p. 262.

unique features; as long as the child is required by social pressures to accept one as a model for itself, and to reject the other, a healthy integration of personality may be difficult to achieve and cross-parent fixations may result, often fostering sexual inversion. A study carried out by Sopchak[1] in this connection, using the MMPI test, is of particular interest. At the 1% level of confidence, he found that men with tendencies toward femininity, paranoia, psychasthenia, schizophrenia and hypomania showed lack of identification with fathers and also (excluding the paranoiac tendency group) with mothers; women with a tendency toward masculinity showed lack of identification with fathers, and at the 5% level of confidence the same lack of identification with fathers was shown by the psychasthenic and schizophrenic groups. This might indicate that individuals who feel hostile toward the father fail to identify with him. Normal men, according to Sopchak, tend to identify with the father, and abnormal men not to identify strongly with either father, mother or people in general. Failure to identify with the father leads to the psychotic triad (paranoia, psychasthenia and schizophrenia) rather than to the neurotic triad (hypochondriasis, depression and hysteria).

An individual's capacity for adjustment presupposes a certain degree of satisfaction with the environment; this in turn depends on his emotional state, any disturbance in which will influence all his actions and attitudes. As Deutsch says[2], "The bridge between the environment and the individual, from the beginning of his life, is his affective relationship to this environment." The homosexual must always have a conflict within his mind by virtue of the powerful, ever-present and directly opposed forces of his sexual impulses, which drive him in one direction, and all the pressures of society, which try to force him into other channels. In some way he has to try and reconcile the two, but the recognition is always present that his sexual tendencies are against the laws of the country and the moral code of our society. Although many homosexuals appear to be well-adjusted, Westwood[3] claims that none is able to "escape the mental anguish or the feeling of guilt common to all homosexuals", and that none is without conflict "which he may learn to conceal by bravado or express in his contempt for conventionality." The results of homosexuality, which may lead to disgrace and ostracism, or to pathological anti-social attitudes, may also lead to severe neurotic conditions. In order to hide his identity and thereby avoid the social and legal penalties, the

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[1]Andrew L. Sopchak, Parental "Identification" and "Tendency toward Disorders" as measured by the Minnesota Multiphasic Personality Inventory, J. Abn. and Soc. Psychol., 46:2, Apr. 1952, pp. 159 - 165.

[2]Hélène Deutsch, 1946, Op Cit., p. 279.

[3]Westwood, Op. Cit., pp. 20, 140.

homosexual invites all the psychological difficulties inherent in living a double life. According to Freud[1], "inverts manifest a manifold behaviour in their judgment of the peculiarities of their sexual instinct. Some consider the inversion as a matter of course, just as a normal person looks upon his libido, and firmly demand the same rights as the normal. Others, however, struggle against their inversion and perceive in it a morbid compulsion." It seems likely that those in whom this struggle persists may exhibit some symptoms of neurosis or of maladjustment.

It is a considerable question whether homosexual persons are so because they are neurotic, or whether their neurotic disturbances are the product of their homosexual activities and of society's reaction to them. General opinion seems to point to the latter. Henry and Gross, for example, make the following statement[2]: "It" (the world of homosexuality) "is a world of insecurity, sometimes tolerated, more often sharply dealt with, by society. For many homosexuals, the business of living in the homosexual world and appearing to live in the external world becomes a burden too great to be borne, and they become social liabilities." Kinsey et al agree in these words[3]: "Most of the complications which are observable in sexual histories are the result of society's reactions when it obtains knowledge of an individual's behaviour, or the individual's fear of how society would react if he were discovered." Westwood[4] makes the following assertion: "Recent research has shown that very few homosexuals show neurotic symptoms in early life. The mental disorders that many of them acquire are not an original part of their abnormal sexual tendencies but a result of their efforts to suppress these tendencies. After years of having to live their emotional life in secret, or even suppress it altogether, they tend to develop other more serious psychological difficulties." That the majority of homosexuals do develop some psychological difficulties seems to be borne out by an analysis of the various psychiatric diagnoses found among Smith's 100 homosexual federal offenders[5]. These showed: neuroses, 17; schizoid personality, 21; psychopathic personality, 42; schizophrenic psychosis, 7; involutional psychosis, 1; mental deficiency, 6; without demonstrable mental disorder other than homosexuality, 6. In all seven schizophrenic psychoses, paranoid ideation predominated. It must be noted, however, that these subjects were all federal offenders.

Whether neurosis is the cause or the result of homosexuality, homo-

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[1]Brill (Ed.), Op. Cit., p. 554. [2]Henry and Gross, Op. Cit., p. 611.
[3]Kinsey et al, 1948, Op. Cit., p. 202.
[4]Westwood, Op. Cit., p. 143.
[5]Smith, Op. Cit., p. 588.

sexuals are generally considered to be neurotic, some writers going so far as to state the particular neurosis or psychosis to which as a group they are especially prone. Perhaps the most common of these is paranoia.

(a) Paranoia.

Page and Warkentin[1] gave the Terman-Miles Masculinity-Femininity test to 50 male paranoid patients, and compared their responses with those of normal adults and non-psychotic active and passive inverts and noted no marked differences between the paranoid patients and either of the other groups except in their choice of occupations and books and in their likes and preferences. On these items, the responses of the paranoids were considerably less masculine than those of the active inverts and the general male population, and significantly more masculine than those of the passive inverts. Comparing their results with Terman and Miles' data[2] on homosexuals' responses in relation to the general male population, they favour the hypothesis "that paranoia is in some way related to passive homoerotism." McDougall[3] claims that a considerable proportion of paranoiac delusions may be found in persons of homosexual tendency, occurring much more frequently in men than in women, probably because such behaviour among women is not liable to the same severity of social condemnation or legal penalty. He adds, however, "Those homosexuals in whom the perversion seems to be innate seem little liable to persecutory delusions." Clifford Allen[4] claims that there is little doubt of the relationship of homosexuality to the psychoses, and asserts that "a large number of the persecutory schizophrenic psychoses of a paranoid type are homosexual in nature."

In his study on homosexuality in dementia praecox patients, Norman[5] found "much evidence that in dementia praecox, paranoid patients, there are strong conscious and unconscious homosexual tendencies", and that the majority of cases showed a strong Œdipus complex fixation; but he points out that there is no proof that these homosexual tendencies are a primarily ætiologic factor in the schizophrenic process, and adds, "it may be merely parallel or concomitant to other constitutional bodily disfunction." This is a point of view which is not always emphasised. Gillespie states that projected oral and anal sadism leads to the paranoid features which are so characteristic of

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[1] James Page and John Warkentin, Masculinity and Paranoia, J. Abn. Soc. Psychol., 33:4, Oct. 1938, pp. 527 - 531.

[2] Terman and Miles, Op. Cit., pp. 242 - 319.

[3] William McDougall, An Outline of Abnormal Psychology, 3rd Ed., London, Methuen & Co. Ltd., 1940, pp. 340 - 341.

[4] Clifford Allen, 1949, Op. Cit., p. 135.

[5] Jacob P. Norman, Evidence and Clinical Significance of Homosexuality in 100 Unanalysed Cases of Dementia Praecos, J. Ner. Ment. Dis., 107:5, May 1948, pp. 484 - 489.

homosexuals and of perverts in general, but he distinguishes between homosexuality and psychosis or neurosis in these words[1]: What characterises perversion and makes it different from psychosis or neurosis is a special technique of exploiting the mechanism of splitting of the ego, by which the pervert avoids psychosis, since a part of his ego continues to accept reality and to behave fairly normally in the non-sexual sphere. The split allows his mind to function on two levels at once - the pre-genital oral-sadistic level corresponding to psychosis, and the phallic level where his conscious mental content bears so much resemblance to the repressed content of the neurotic."

Although some homosexuals may show some paranoid features, and although some paranoiac patients may show conscious or unconscious homosexual tendencies, it should not be concluded that homosexuality and paranoia are necessarily closely related.

(b) Schizophrenia.

Since some authors have attempted to relate homosexuality to schizophrenia, a study carried out by Bosselman and Skorodin[2] is of interest. Their hypothesis is as follows: "It might be expected that any group of people who deviate markedly from the norm in social behaviour would show a deviation from the established standards of masculinity and femininity. This would be expected particularly of the schizophrenic group who in general are socially (including sexually) maladjusted." They found that of 48 male schizophrenic patients, 66.6% deviated to the feminine side, the mean deviation being 25 points; of 59 female schizophrenic patients, 71.2% deviated to the masculine side, with a mean deviation of 24 points. The males in this group deviated most on Exercise 5 (interests) and least on Exercise 4 (emotion and ethical attitudes), whereas the female deviations were reversed, being most on Exercise 4 and least on Exercise 5. If there is in fact any relationship between homosexuality and schizophrenia, it would appear to be more likely among the passive, feminine type of male homosexual and the active masculine type of female homosexual, i.e. those who have been referred to as the "extreme" type of homosexual.[3]

In an analysis of sex offenders among male psychiatric patients, Ruskin[4] found that certain types of psychotics showed predominance toward

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[1] W. H. Gillespie, Notes on the Analysis of Sexual Perversions, Internat. J. Psychoanal., 33:4, 1952, pp. 397 - 402.

[2] B. Bosselman and B. Skorodin, Masculinity and Femininity in Psychotic Patients, Am. J. Psychiat., 97, Nov. 1940, p. 699.

[3] See p. 51.

[4] Samuel H. Ruskin, Analysis of Sex Offences among Male Psychiatric Patients, Am. J. Psychiat., 97, Jan. 1941, p. 955.

certain types of delinquencies. The schizophrenic group "showed predominance toward exhibitionism, pedophilia and homosexuality which are infantile forms of sexuality"; also, it should be noted, "molesting of women and physical assault." The environment of the institutionalised psychotic is conducive to these types of offence, and Ruskin does not state whether he bases his "predominance toward" such activity on the total number of offences of each individual, or on the total number of patients, of whom the schizophrenics might have formed the majority of the entire group.

The effect of environmental factors on the child's personality integration, and especially parental attitudes as evidenced by the over-possessive, oversupervising, anxious, domineering mother, which were found by Clardy[1] to be an unusually prominent ætiological factor in producing schizophrenia in childhood, are often quoted as factors in the ætiology of homosexuality. A common background environmental factor, however, is not necessarily a common ætiological factor in schizophrenia and homosexuality.

Campbell is emphatically not prepared to agree that the homosexual is schizophrenic. He states[2]: "Out of dozens of homosexuals personally observed, the writer is not aware of one who became emotionally unstable, excitable, tearful, or who attempted suicide. Nor did any manifest a reaction which remotely resembled schizophrenia." He goes on to argue that, although the schizoid personality has been referred to as a latent homosexual, he should really be designated only as a repressed homosexual, since his weak homosexual desires are repressed whilst the word 'latent' implies that in suitable circumstances the individual may become overtly homosexual. Such, he adds, is not the case. On the contrary, "as soon as he becomes minutely conscious of his homosexual desires, as when confined to a group of his own sex, the schizoid becomes fearful, excitable and terrified, and may develop a transient psychosis known as homosexual panic... He is fearful of his homosexual disgrace. The true homosexual experiences no such reaction." This panic is a rebellion against homosexuality, although the repressed tendencies cannot be denied. Campbell concludes, therefore, that "the schizoid personality and the homosexual personality are distinct pathologic types; the schizoid does not become homosexual, and the invert does not become schizoid." Although the schizoid occasionally demonstrates homosexual tendencies, Greenspan and Campbell[3] reiterate that because of his keen conscience and idealism,

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[1] E. R. Clardy, Development and Course of Schizophrenia in Childhood, Psychiat. Quar., 25:1, 1951, pp. 81 - 89.

[2] Campbell, Op. Cit., pp. 178, 206 - 207.

[3] Green span and Campbell, Op. Cit., p. 682.

the schizoid cannot tolerate a homosexual adjustment; he usually does not succumb to the desire as is found in the latent homosexual, and the homosexual personality never evidences repression of the homosexual tendencies or resultant trends, such as panic states.

It cannot be denied that the homosexual is as liable to develop a psychosis as is the heterosexual, but it should not be inferred from this that every psychotic patient, particularly in the schizophrenic group, is a repressed, latent or overt homosexual, or that the overt homosexual is essentially a schizoid personality. The vast majority of homosexuals, on whom very little research has been done, may be more neurotic than other members of society but have not reached the stage of psychosis, nor is it inevitable that they will. Sprague[1] maintains that unless the homosexual is able frankly to admit and gratify his desires, or to modify its expression to make it socially acceptable through the process of sublimation, then there may result a sacrifice in his appreciation of reality with the formation of a psychosis, or at least a setting aside of his understanding of the actual forces determining the situation. The reason why female homosexuality is often repelled with panic is, according to Deutsch[2], "that the fulfilment of this erotic desire signifies not only return to an infantile form of existence, but also a profound union with the mother, a union that is of a deeply regressive character and that contains the threat of psychosis and even of death." From this it would appear that the homosexual flees from expression of his sexual desires in order to escape the threat of psychosis. Paul Federn[3] has cautioned, "The most important self defence against schizophrenia is the neurosis, which is usually of the hysterical or obsessional type." It appears more likely, therefore, that the homosexual would show neurotic symptoms rather than become a psychotic, particularly a schizophrenic psychotic. An interesting case is reported by Liebman[4] of a male homosexual who showed transvestism and psychosis. This patient was treated with electroshock therapy and recovered from psychosis and transvestism, but remained overtly homosexual

(c) Neurosis.

Freud has emphasised[5] that "the instincts which manifest themselves

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[1]George S. Sprague, Varieties of Homosexual Manifestations, Am. J. Psychiat., 92:1, Jul. 1935, pp. 143 - 154.

[2]Deutsch, 1946, Op. Cit., p. 200.

[3]Paul Federn, quoted by Victor W. Eisenstein, Differential Psychotherapy of Borderline States, Psychiat. Quar., 25:3, 1951, pp. 379 - 400.

[4]Samuel Liebman, Homosexuality, Transvestism and Psychosis, J. Ner. Ment. Dis. 99:6, June 1944, pp. 945 - 957.

[5]Freud, 1949, Op. Cit., p. 53.

physiologically as sexuality play a prominent and unexpectedly large part in the causation of neurosis." He makes the categorical statement[1]: "In all neurotics we find without exception in the unconscious psychic life feelings of inversion and fixation of libido on persons of the same sex." This has been as emphatically denied by Greenspan and Campbell[2] who state, "We have yet to discover a basically neurotic patient who is an invert... We cannot agree that neuroses commonly result from homosexuality or are productive of homosexuality." Freud's contention, however, is supported by Kimball Young's investigation of female homosexuals, in which the overt-practice group were found to have had in the past a high proportion of 'nervous breakdowns'; although he found no psychopathic symptoms, he claims evidence that neuroticism is more closely associated with the overt practice group than with the other (i.e. those who had experienced intense emotional responses to members of the same sex.) He warns, however, that these neurotic responses may be constitutionally or culturally conditioned, so that it is not known how much is related to homosexuality and how much to other factors.

It seems possible that homosexuality may be merely an additional symptom of a neurotic personality. Myerson and Neustadt take the stand that homosexuality very often forms the background upon which neurotic or psychotic symptoms manifest themselves[4] and Brody[5] states that the homosexual is a neurotic with a deep-rooted character disturbance who would not be a healthy person even if he lived in a society where sexuality with the same sex was socially acceptable. It is difficult to reconcile this statement with homosexuality as it exists among many primitive peoples and particularly with Devereux' account of institutionalised homosexuality among the Mohave Indians.

Campbell does not believe that the homosexual is neurotic; he states that[6] "the psychoneurotic almost never shows any homosexual tendencies; he does not even experiment with homosexualism", and claims that "if the psychoneurotic had to carry the burden of being considered a degenerate and a pervert by his fellow citizens he would probably kill himself immediately." Weight of evidence has led Landis et al to interpret the neurotic personality as "a style of life which is consistent from a very early age ... a gradually developed mode of emotional non-adjustment" which may be the result of a basic constitutional inadequacy exposed to factors conducive to insecurity and

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[1] Freud (Ed. Brill), Op. Cit., p. 575.
[2] Greenspan & Campbell Op. Cit., p. 682.
[3] Kimball Young, Op. Cit., p. 581.
[4] Myerson and Neustadt Op. Cit., p. 944.
[5] Brody, Op. Cit., p. 57.
[6] Campbell, Op. Cit., pp. 95, 185.
[7] Landis et al, pp. 234, 142, 144.

instability in childhood. This neurotic style of life, as opposed to the psychotic and the normal, constituted in the group examined by them "a pattern of deviation from the normal which gave convincing evidence of having been manifested with consistency from the time of early childhood to adulthood." One unfortunate combination of events might lead to another, and thus might eventually give rise to the adult neurotic manifestations in an individual who was constitutionally inadequate. Their psychotics gave little or no evidence of a consistent type of deviation from the normal course of psychosexual development. This argument would support the theories that 'true' or 'innate' homosexuals show signs of their inclinations at a very early age, and that homosexuals rarely become psychotic.

Some of the neurotic symptoms which have been said to be particularly prevalent among homosexuals are the following:

(a) Hirschfield[1]: hypersensitivity, moodiness, predisposition to alcoholism and drug-taking, religious and persecution mania, hysterical and hypochondriac conditions ("these irregularities frequently run in their families"). Severehysterical conditions in homosexual women, notably heart neuroses and severe nervous dyspepsia, complete insomnia and a high degree of debility. (Quoted by Ellis[2]: depression, but not pure melancholia and very seldom mania.)

(b) Terman and Miles[3]: social maladjustment, nervousness, lack of self-confidence, a low degree of self-control, and a marked tendency to worry and anxiety.

(c) Brancale, Ellis and Doorbar[4]: emotional disturbance, feelings of inadequacy, anxiety, depression and tension.

(d) Westwood[5]: paranoia; chronic alcoholism and drug addiction; obsessional neurosis; anxiety hysteria or phobic hysteria; anxiety depression; neurasthenia.

It will be seen that the neurotic symptoms common to two or more of the above authors are alcoholism and drug addiction, paranoia, hysteria, anxiety and depression. In connection with alcoholism, Campbell is again a dissenter; he points out that if, as the psychoanalytic school believes, homosexuality is the cause of alcoholism, then we should expect to see more inebriates among homosexuals, whereas he states[6], "actually we observe very

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[1]Hirschfeld, Op. Cit., p. 237.
[2]Havelock Ellis, Op. Cit., p. 267.
[3]Terman and Miles, Op. Cit., p. 283.
[4]Brancale et al, Op. Cit., p. 19.
[5]Westwood, Op. Cit., p. 143.
[6]Campbell, Op. Cit., pp. 262, 182, 175.

few. That the alcoholic is basically homosexual (but not overtly so) is probable, but that this causes his alcoholism is a remote possibility," and although alcohol to a certain extent may form a special mode of adjustment, only rarely does the homosexual reach a stage of chronic alcoholism. He also disagrees in the following words with the development of anxiety in the homosexual: "The invert is not pathologically laden with conscience, as is the neurotic, and consequently does not develop an anxiety state as a result of his predicament." Bálint, however, argues along different lines. He says[1] that homosexuality merely produces a state of tremendously strong excitation without of itself giving complete gratification, in other words the fore-pleasure mechanisms may produce intense excitation without being able to discharge it. If the outlet of genital end-pleasure is blocked by resistances due to repression, and the only way open to the individual is fore-pleasure, then the result is either an anxiety neurosis or some form of morbid craving. This argument would seem to apply mainly to women or to mutual masturbation between men, where the usual genital end-pleasure is not achieved.

Regarding the remaining symptoms, there is usually one other author who makes a similar assertion. Ellis, for example, says[2] that homosexuality is frequently associated with nervous conditions, the invert being especially liable to suffer from a high degree of neurasthenia, often including much nervous weakness and irritability. His footnote adds: "Krafft-Ebing considered that the temporary or lasting association of homosexuality with neurasthenia having its root in congenital conditions is 'almost invariable', and some authorities (like Meynert) have regarded inversion as an accidental growth on the foundation of neurasthenia." Westwood's obsessional neurosis is in keeping with Karpman's contention[3] that "people suffering from paraphiliac neuroses are driven compulsively to seek gratification of an apparently insatiable urge." The less specific symptoms of emotional disturbance, social maladjustment, etc., may be equated to East's comment[4] on Hubert's study of homosexuals and various other studies on female delinquents, that women homosexuals as a group present many characteristics to be classed as perversions and anti-social behaviour in considerable excess of those shown by a group of women whose sexuality is normally developed. Kahn[5] gives the same impression when he says: "The homosexuals are highly emotional and hypersuggestible individuals... They are mentally unstable and show a difficulty for adaptation to their environment, as is manifested by their constant

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1Michael Bálint, Eros and Aphrodite, Internat. J. Psychoanal., 19, Apr. 1938, pp. 199 - 213.

2Havelock Ellis, Op. Cit., p. 332.

3Karpman, Op. Cit., p. 186.

4Norwood East, 1947, Op. Cit., p. 13.

5Kahn, Op. Cit., p. 133.

travelling from city to city, and sometimes, from country to country. Their various bad habits, such as drug addiction, perversions, etc., further prove their mental instability." If social maladjustment may be considered in the same light as the psychopathic personality, then the finding of Landis et al[1] is pertinent; they found that strong homoerotic tendencies were relatively frequent in the psychopathic personality group, four of their 12 women showing definite homoerotic trends, although only one was an overt homosexual.

Although, according to Havelock Ellis and especially emphasised by Näcke, there is no frequent relationship between homosexuality and insanity (such homosexuality as is found in asylums being mostly of a spurious character), other writers have linked suicide, murder and sadism with homosexuality. In 18 cases of actual, potential and chronic suicides, O'Connor[2] found that in more than 50% of their material homosexual tendencies were uncovered; in more than 90% of the material, the sexual life was unsatisfactory to a marked degree, either in the direction of weakness of the heterosexual urge or of strength of the homosexual urge, or both. Amongst many of the depressive types, he found that pathological perfectionism stood out prominently (this being roughly equivalent to obsessional or compulsive neurotic symptoms), although Campbell maintains[3] that the cycloid rarely manifests any homosexual tendencies. Clifford Allen[4] is of the opinion that suicide, often in a curious or ritualistic manner, is closely related to the homosexual psychoses and that homosexual murder is common because of (a) jealousy, which is much stronger and more violent in the homosexual ("the invert is the product of a great deal of unresolved hatred for another man, i.e. his father, in many cases. Under stress this hostility is released with the result that the beloved is killed"); and (b) blackmail. Again Campbell disagrees[5] with this view. He states, "Psychosis and suicide are two special modes of adjustment if they may be so considered, which this writer has never seen used by the homosexual personality." In presenting two case reports of members of homosexual partnerships, Robbins[6] puts forward the view that the homosexual is a neurotic personality whose dominant neurotic drive, sadism, determines the distinguishing symptom, homoerotism; and that the psychoanalytic data suggest that such symbiotic unions peculiarly nurture the greatest opportunity for

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[1] Landis et al Op. Cit., p. 184.

[2] William A. O'Connor, Some Notes on Suicide, Brit. J. Med. Psychol., 21, 1948.

[3] Campbell, Op. Cit., p. 232.

[4] Clifford Allen, Op. Cit., p. 136.

[5] Campbell, Ibid, p. 182.

[6] Bernard S. Robbins, Psychological Implications of the Male Homosexual 'Marriage', Psychoanalyt. Rev., 30:4, Oct. 1943, pp. 428 - 437.

mutual sadistic exploitation.

(d) Adjusted.

There can be little doubt that there are homosexuals, as there are heterosexuals, with comparatively stable nervous systems, just as there are neuropathic, psychotic or alcoholic individuals in both groups. The former, according to Hirschfeld[1], may be regarded as healthy, or almost healthy, apart from their abnormality, while the latter are hereditarily highly strung and hypersensitive and suffer in this manner quite apart from their homosexuality. Carpenter[2] comments, "It emerges that men and women of the exclusively Uranian type are by no means necessarily morbid in any way - unless, indeed, their peculiar temperament be pronounced in itself morbid"; this point of view is supported by Otto Weininger[3] who states that it is not generally recognised that sexual inverts may be otherwise perfectly healthy, and with regard to other matters quite normal.

Where there is exposure to two different cultures, breakdowns might be expected to occur; many homosexuals might therefore be expected to show some signs of breaking down in our society. However, there are many homosexuals who do manage to make a satisfactory social adjustment; these are the ones who are not in penal or psychiatric institutions and who are therefore seldom included in any studies on homosexuality. Although Henry[4] contends that well-adjusted homosexuals are rare, Loeser[5] points out that there are homosexuals without conflict, who have accepted their status without reactions of guilt or inferiority, who are well-adjusted individuals who neither require nor benefit from psychotherapy, and he estimates that roughly 50% belong in this category.

With certain qualifications ("behind abstract thinking, phantasy and the security of cultural aloofness"), Greenspan and Campbell[6] believe that the homosexual obtains a protective medium in which he is comfortably adjusted. Kinsey et al[7] also incline to this view. They state that whilst, in a social sense, the term abnormal might apply to sexual activities which cause social maladjustment, at the same time "it is not possible to insist that any departure from the sexual mores, or any participation in socially taboo activities, always, or even usually, involves a neurosis or psychosis"; they support their contention by quoting their case histories which "abundantly demonstrate

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[1] Hirschfeld, Op. Cit., p. 237.
[2] Carpenter, Op. Cit., p. 22.
[3] Quoted by Davis, Op. Cit., p. 243.
[4] Henry, 1937, Op. Cit., p. 905.
[5] Loeser, Op. Cit., pp. 92 - 101.
[6] Greenspan and Campbell, Op. Cit., p. 682.
[7] Kinsey et al, 1948, Op. Cit., p. 201.

that most individuals who engage in taboo activities make satisfactory social adjustments."

A review of the literature on homosexuality reveals the fact that much less has been written about the phenomenon among women than among men, and that examples of women homosexuals are apt to be of the extreme type. Landis et al[1] studied a group of 153 psychiatric sexually 'normal' women and 142 non-hospitalised sexually 'abnormal' women. They report that, although their group was small, there was suggestive evidence that led them to believe that it is possible for the homoerotically oriented woman to work out a fair personality adjustment on this libidinal level; they report further the interesting finding that there were no more homoerotic individuals among the abnormal group than among the normal.

On the subject of homosexuality and neurosis, therefore, theoretical opinions range from the viewpoint that all homosexuals are basically neurotic to the viewpoint that most of them are satisfactorily adjusted, with all grades of opinion between these two extremes. It seems possible, therefore, that not all authors are discussing exactly the same quality or type of behaviour when they refer to homosexuality.

## 5. Pseudohomosexuality.

Freud has emphasised the co-existence of neurosis and subconscious homosexual feelings, which has been equally emphatically disclaimed by Campbell. The biologists and anthropologists have suggested that through our common inherited mammalian background, every human being has the potentiality for indulging in homosexual behaviour, which is subject to the conditions imposed by the society in which he lives. Kinsey et al have pointed out that the pattern of sexual behaviour in any individual may vary within his lifetime from completely homosexual to completely heterosexual, and that both types of responses may exist concurrently at any time during an individual's life. How then, is one to select a group of people and label them homosexual? Campbell replies to this question as follows[2]: "The true invert may be recognised as such only if he admits the practice and can give a characteristic account of his sexual adjustment... The true invert is not dramatic about his anomaly, but matter-of-fact." Others who indulge in homosexual practices may be divided into various categories, all of which fall under the heading of pseudohomosexuality. Hirschfeld[3] distinguishes three main groups under this

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[1] Landis et al, Op. Cit., pp. 54, 57. [2] Campbell, Op. Cit., p. 291.
[3] Hirschfeld, quoted by Ellis, Op. Cit., p. 83.

heading, viz:

(a) Those who indulge in homosexual practices for purposes of gain, i.e. prostitution or blackmail;

(b) those who "allow" homosexual relationships; and

(c) those who indulge in abnormal circumstances such as prison, barracks, on board ship, school, etc.

(a) Westwood[1] agrees that many of the prostitutes and perverts are not homosexual in the strict sense of the word. Although comparatively few of these people accept money for homosexual relationships, they frequently rob their partners of clothes or valuable possessions, and any attempt at retaliation is forestalled by physical violence or threatened blackmail. They correspond to Henry and Gross' "hoodlum" type. In all probability they are not themselves homosexual, but, with the intention of gain, deliberately prey on the susceptibilities and desires of those who are. It is also possible that their behaviour might be a form of protest against their own repressed or unconscious homosexual leanings.

(b) It often happens that a homosexual act is committed in a state of intoxication by persons who are otherwise entirely heterosexual; or an occasional act may be carried out for the sake of curiosity, desire for new experience or satiety with heterosexual relationships. These people "allow" homosexual relationships without being in themselves necessarily homosexually inclined. Many homosexual men have sexual relations with this type of person exclusively. They meet a person casually in a bar or in the street and by persuasion or coercion induce him to have a homosexual affair; they seldom or never see each other again, and these episodes are known as "one-night stands."

(c) Homosexuality in the abnormal circumstances such as those described above is extremely common, and the majority of people to whom this applies revert to heterosexual patterns of behaviour when they return to a normal environment. Here it is mainly a case of 'faute de mieux'.

In criminal cases, the homosexual is "usually classed with persons who are given to pederasty for simply vicious reasons", according to Krafft-Ebing[2], whereas in fact the homosexual is not a criminal type and very seldom is interested in young children. Clifford Wright[3] points out that "true homosexuality usually originates early in life, at least as early as the beginning

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[1]Westwood, Op. Cit., p. 121. [2]Krafft-Ebing, Op. Cit., p. 341.

[3]Wright, Med. Rec., 1935, Op. Cit., p. 407.

of puberty, and must be distinguished from acquired sodomy, and other forms of sexual perversion, as well as from those cases where individuals have fallen into this habit more or less accidentally." Hirschfeld[1] states that "homosexual intercourse without a homosexual mentality is - according to Bloch's definition - pseudohomosexuality."

It would appear that a great number of individuals who have been classed as homosexuals should fall under the heading of pseudohomosexuals if the above comments are taken into account. According to Hoch and Zubin[2], "the true homosexual whose sexual outlets are seldom or never heterosexual constitutes a relatively small number as compared with the relatively high proportion of males who, beginning with adolescence, have had more or less homosexual experience. The latter are essentially pseudo-homosexuals, taking part in these activities accidentally, incidentally, experimentally, and as inferior substitutes for heterosexual behaviour." It is difficult to observe the nebulous dividing line between 'normal', pseudohomosexual and 'true' homosexual, and any survey of homosexuals as a group must of necessity take into account the possibility that to-day's homosexual may be heterosexual to-morrow, and that any 'normal' control subject may also have had some homosexual experience during his lifetime.

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[1]Hirschfeld, Op. Cit., p. 228.

[2]Hoch and Zubin, Op. Cit., p. 235.

## IV. SELECTION OF SUBJECTS FOR PREVIOUS STUDIES.

In comparison with other forms of abnormal behaviour, there is a paucity of data on homosexuality. The following comment was made by Kinsey[1] in 1941: "Our civilisation so strongly condemns the behaviour that scientific examination of it has hardly begun. The best of the published studies are based on the select homosexual population which is found within prisons, and it seems, heretofore, to have been impossible to discover the extent to which the phenomenon occurs in otherwise socially adjusted portions of the population." The cases which reach prison, as Allen[2] points out, "are chronic, unwilling to be cured and of bad prognosis", and current theories on sexual perversion are too largely based on the select group of most atypical homosexuals who fall into the hands of the law, or on the persons who go to psychiatrists or clinics for help. No one can be certain how far the behaviour of clinical patients or prison inmates may represent the behaviour of the population as a whole, and Kinsey et al[3] criticise studies on sexual behaviour in the following words: "A primary fault in most studies of sex offenders is the fact that they are confined to sex offenders. Just as the laboratory scientist needs a control group to interpret what he finds in his experimental animals, so we need to understand the sexual behaviour of persons who have never been involved with the law."

### 1. Prison Cases.

Since the homosexual seldom goes directly to a doctor seeking help, it is in penal institutions or military service that the greatest opportunities are presented to study a number of homosexual individuals. Among the studies based on the select prison population are the following:

1. 1936. Terman and Miles[4]: Studied 46 Alcatraz male homosexuals, who were compared with an army group of "roughly comparable ages."
2. 1937. Kahn[5]: Studied male homosexuals on Blackwell's Island at the New York County Penitentiary for male prisoners and at the Women's Workhouse for female prisoners. Over 500 were studied, but 75 were investigated carefully.
3. 1941. Kimball Young[6] quotes 19 homosexual men in a state prison who were

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[1] Kinsey, 1941, Op. Cit., p. 425.
[2] Allen, 1949, Op. Cit., p. 337.
[3] Kinsey et al, 1953, Op. Cit., p. 18.
[4] Terman and Miles, Op. Cit., p. 242.
[5] Kahn, Op. Cit.
[6] Kimball Young, Op. Cit., p. 678.

investigated by Terman and his co-workers.

4. 1945. Loeser[1]: A study of 270 cases of sexual psychopaths in the Military Service, of whom 210, or 78%, were, after careful study, diagnosed as true homosexuals.

5. 1948. Darke[2]: 100 male homosexual prisoners, plus 32 cases from Vol. I of "Sex Variants", by George W. Henry.[3]

6. 1948. Darke and Geil[4]: 100 male homosexuals selected from the population of the Medical Center for Federal Prisoners, Springfield, Missouri, all of whom had taken part in overt homosexual activity; cases with but occasional random homosexual activity in prison were not included.

7. 1952. Brancale, Ellis and Doorbar[5]: 300 convicted sex offenders, of whom 42% had been convicted for the major offences of rape, sexual assault, noncoital sex relations with a minor and homosexuality.

8. 1954. Smith[6]: 100 homosexual federal male offenders, 15 of whom were committed for offences directly related to their sexual deviation, 9 of these on sodomy charges involving their participation in some type of homosexual act.

9. 1938. Henry and Gross[7]: of the 100 underprivileged homosexuals studied, including only two females, approximately two-thirds of the histories were taken from Court records.

Unfortunately, it is only the dregs of both classes, heterosexual as well as homosexual, who find their way into prisons, and it is from this group that statistical evidence about homosexuality is largely collected. This evidence is not more applicable to the socially adapted invert than such evidence on heterosexuals would be to the non-custodial general population.

2. Psychiatric Cases.

Attempts to relate homosexuality to psychosis have led to various reports on groups of institutionalised psychiatric cases, among which are the following:

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[1]Loeser, Op. Cit., pp. 92 - 101.

[2]Darke, Op. Cit., p. 252.

[3]See p. 74.

[4]Darke and Geil, Op. Cit., p. 218.

[5]Brancale et al, Op. Cit., pp. 17 - 21.

[6]Charles E. Smith, Op. Cit., p. 586.

[7]Henry and Gross, Op. Cit.

1. 1934. Henry and Galbraith[1]: In a study o constitutional factors in homosexuality, compared 33 male and female homosexual psychotic patients with 15 patients whose heterosexual adaptation was "reasonably satisfactory." Only 25% of the homosexual group was married, none with satisfactory sexual adjustment, and ¾ of the marriages were dissolved by separation, divorce or annulment. If these patients were indeed homosexuals, the finding is merely what might have been expected, even without the additional complication of psychosis.

2. 1940. Williams[2]: 28 male homosexuals undergoing treatment for drug addiction.

3. 1940. Landis et al[3]: 153 psychiatric sexually "normal" women and 142 non-hospitalised sexually "abnormal" women.

4. 1941. Ruskin[4]: 130 male psychiatric patients.

5. 1948. Norman[5]: Following up Campbell's contention that the true homosexual does not develop a psychosis or psychoneurosis, Norman studied 125 hospitalised dementia praecox patients of different types.

3. Non-Institutionalised Cases.

Dickinson and Beam[6] commented in 1934 as follows: "Yet the detailed and continuous study" (of homosexuality) "continues to be of men and of psychopathic cases - sometimes observed in legal suits, in institutions or after serious collapse. Under these conditions, effort to establish a type is premature." Since this date, there have been efforts to study the non-institutionalised homosexual and to include some women, but the literature on the subject is still sparse. Perhaps the greatest single contribution is that of Kinsey and his collaborators who have published their findings after interviewing 5,300 white males and 5,940 white non-prison females. The many thousands of histories obtained and analysed by Hoch and Zubin[7] are, as they state, "based on such a broad sampling of the total population as clinicians, personal counsellors, and law-enforcement officers rarely see." Laidlaw

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[1]George W. Henry and Hugh M. Galbraith, Constitutional Factors in Homosexuality, Am. J. Psychiat., 13 (old series, 90): 6, May, 1934, pp. 1249 - 1267.

[2]Williams, Op. Cit., see p. 32.

[3]Landis et al, Op. Cit. See p, 68.

[4]Ruskin, Op. Cit. See p. 60.

[5]Norman, Op. Cit. See p. 59.

[6]Dickinson and Beam, Op. Cit., p. 204.

[7]Hoch and Zubin, Op. Cit., p. 28.

studied a group of male and female homosexuals from all walks of life "who were not disturbed by their homosexuality to the extent of having to seek psychiatric aid", and who participated on a purely voluntary basis[1]. This was a very general survey and no specific conclusions were drawn. Another study was carried out by Henry[2] who interviewed 40 male and 40 female sex variants. These he somewhat arbitrarily divided into three groups, bisexual, homosexual and narcissistic, 22 male and 16 females falling into the homosexual group. It was from these cases that Darke selected 32 males for his study on heredity as an ætiological factor in homosexuality[3], including under the heading "homosexual" some cases that Henry had designated narcissistic. However, from the detailed case histories, each individual had had some homosexual experience, so that Henry was justified in considering them all as one group of sex variants, but they should not be studied as a group of homosexuals.

In undertaking a study of non-institutionalised homosexuals, there are two major difficulties, (a) the selection of suitable subjects, and (b) obtaining their co-operation. It must be recognised that there are very few homosexuals who have not had at least some heterosexual experience, and that any "normals" used as controls may also have had some homosexual experience at some time in their lives.

Regarding co-operation, Landis et al report that they found it more difficult to obtain information on homoerotism than on any other phase of the personal life. They state, "The details of marital sex relations, premarital sexual experience, and so on, were freely reported in comparison to the way in which subjects responded to questions which they realised bore on homoerotism, even when the questions were as indirect and inocuous as possible. All of the responses which we obtained on this topic must be related to a cultural pattern in which there are strong bans on homoerotism so that it is generally regarded as unnatural, degenerate and obscene." Dickinson and Beam in "The Single Woman"[5] make a similar comment, viz: "The patient would affirm coitus with reluctance and after that, with even greater hesitation, autoerotism; enquiry about homosexuality met a blank wall." Better co-operation is usually received from male subjects and Kahn[6] comments that in his investigation, officials in charge of the male prisoners were all most co-operative, "whereas Mrs. Mary Lilly, who was acting in the capacity of warden of the

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[1]Robert W. Laidlaw, A Clinical Approach to Homosexuality, Marr. and Fam. Living, 14:1, Feb. 1952, pp. 39 - 45.

[2]Henry, Sex Variants, 1950, Op. Cit. [3]See p. 72.

[4]Landis et al, Op. Cit., p. 50. [5]Dickinson and Beam, Op. Cit., p. 203.

[6]Kahn, Op. Cit., p. 13.

Women's Workhouse, proved particularly unco-operative and resentful." In the present study, this sex difference was found to be equally applicable; many women categorically refused to participate and some did so only after persuasion, whereas many men asked to participate before being approached and there was only one refusal.

In the literature here reviewed, there seem to be contradictory reports on most phases of homosexuality that have been studied, and the majority of the findings that have been published have been on institutionalised or psychiatric cases. In the following sections emphasis will be on the environmental background of the non-institutionalised homosexual subject, his intelligence and personality.

# PART II. THE PRESENT STUDY.

## I. INTRODUCTION.

The fifty male and fifty female subjects who participated in this study did so voluntarily and knowing that the object of the survey was to compare a group of homosexuals with a group of heterosexuals with regard to intelligence and personality, to see whether there are any group differences as shown by the Wechsler-Bellevue test, and also to see whether there are any common environmental factors which might appear to be indicative of the ætiology of homosexuality.

The word homosexual is here defined as a person who acknowledges his homosexuality, whose sexual life is almost exclusively with a person of the same sex, and whose preference is for sexual relations with a member of the same sex. The survey was prompted by the paucity of information available on non-institutionalised homosexuals, and particularly on female homosexuals, in the literature on the subject.

Every person taking part in this investigation was assured of the confidence of the record, that anonymity would be retained, and that no case history as an individual unit, or discussion of any history or individual, would result. Volunteers were from most of the large centres of the Union of South Africa as well as from some rural areas. Afrikaans speaking subjects who might have been handicapped by language difficulties were not included; others were rejected on the grounds that they were too young, or were not considered to be homosexual in accordance with the above definition. The age range is from 22 years and 7 months to 60 years and 6 months, with Means and S.Ds. of 35.8534 and 8.37345, and 37.1346 and 9.32494 for the males and females respectively. The mean age of the entire group is 36.49400 with an S.D. of 8.88510.

The control subjects were taken from the files of the National Institute for Personnel Research, where the Wechsler-Bellevue test is in the process of being standardised for use in South Africa. Subjects in the test group were matched individually by age, standard of education and, where possible, type of occupation. All tests were checked by an independent and experienced Wechsler-Bellevue tester.

Since no questions on the sex life of the control group were asked, the criterion for sexual "normality" was marriage. It must be re-

emphasised, however, that some of these subjects used as controls, in spite of being married, may have had some homosexual experience during their lives; but it has been assumed that by virtue of their marriage, their preference or choice, as opposed to that of the homosexual group, is for sexual relations with a member of the opposite sex.

## II. BACKGROUND.

### 1. Familial Background.

#### Instability.

The question of family instability has been discussed[1] in connection with homosexuality. Although Hirschfeld is quoted by Ellis[2] as finding that 75% inverts are of sound heredity, Hirschfeld himself makes the following assertion[3]: "The relatives of homosexuals very frequently betray an unmistakable neuropathic disposition or characteristics which are known to be unfavourable to the stability of the nervous system in their descendants." He quotes such things as blood-related ancestors, insanity, suicides, alcoholics, psychotics, mental inferiority, epilepsy, drug addiction and delinquency. Havelock Ellis[4] noted that 24 out of 62 homosexual women (39%) had "reason to believe that other cases of inversion have occurred in their families", usually brothers, sisters, cousins or uncles, and he adds, "Both Krafft-Ebing and Moll have noted a similar tendency. Van Römer states that in one-third of his cases there was inversion in other members of the family." Kahn states[5], "As a rule there is something abnormal with one or more members of the family of the homosexual, although the majority deny abnormalities"; a number of his subjects, however, "admitted the neurotic and unstable natures of their families and the neurotic traits which are dominant in most of the families from which homosexuals come." Terman and Miles[6] noted that in "several cases" there appeared to be considerable evidence of instability in one or both parents, and considered that such conditions were "probably connected with homosexuality both as cause and effect."

As opposed to these views, Jonas[7] points out that "the accumulated data indicate that overt homosexuality occurs in a heterogeneous group of individuals", and Campbell says[8], "It can be safely stated that the families of inverts are an average, normal cross-section of the population and could not be called degenerate stock."

Although it is difficult to assess "degenerate stock", specific questions on the immediate ancestry (i.e. going back to the grandparents) revealed a high proportion of instability of one sort or another in the

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[1] See pp. 26 ff.

[2], [4] Ellis, Op. Cit., pp. 267, 265.

[3] Hirschfeld, Op. Cit., p. 278.

[5] Kahn, Op. Cit., pp. 39, 45.

[6] Terman and Miles, Op. Cit., p. 319.

[7] Jonas, Op. Cit., p. 634.

[8] Campbell, Op. Cit., p. 183.

relatives of the present test group, as well as a number of families with no known abnormality. The findings are presented in Table I.

Instability in Family.

| | Grand-parents | Parents | Siblings | Aunts/ Uncles | Cousins | TOTAL |
|---|---|---|---|---|---|---|
| Alcoholic | 5 | 7 | 2 | 13 | | 27 |
| Excessive drinker | 2 | 10 | 3 | 1 | | 16 |
| Drug Addict | | 4 | | 2 | 2 | 8 |
| Suicide | 5 plus 1 attempted | 3 | | 8 | 5 | 21 |
| Homosexual | | 1 | 6 | 7 | 14 | 28 |
| Suspect Homosexual | | 3 | 7 | 6 | 5 | 21 |
| Delinquent | 3 | 5 | | 6 | 2 | 16 |
| Psychotic | 2 | 2 | 2 | 5 | 6 | 17 |
| Eccentric/ Neurotic | 2 | 5 | 7 | 4 | | 19 |
| Mentally retarded/ Defective | | | 2 | 2 | 11 | 15 |
| Epileptic | | | | | 1 | 1 |
| Blood related ancestors | 5 | 1 plus 1 suspected* | | | | 6 |

*Subject is illegitimate but thinks parents are related.

TABLE I.

The high number of alcoholics, suicides, other homosexuals in the family and institutionalised psychotics is striking; but it must be pointed out that a few families contributed a high proportion of these figures and others contributed very few, whilst 21 of the subjects had no knowledge of any instability whatsoever and a further five subjects who had been adopted were completely ignorant of their antecedents. In 27 cases there was only one member of the family who was unstable; this instability might have been merely suspected homosexuality or excessive drinking, or it might have been sufficiently severe to include under several headings, e.g. a paternal cousin who was a delinquent and an alcoholic, who was later institutionalised and finally committed suicide. The greatest number of cases of instability was contributed by only ten subjects, each of whom had more than three relatives who were in some way abnormal.

Many normal people hide a skeleton in the family cupboard and it is possible that the above group percentage is no higher than it is among the control subjects who were not asked to divulge such information. The

inference, however, is that a homosexual may arise in an average, normal family, with no sign of degeneracy or instability, or he may be found in a family which is highly unstable; but that in the majority of cases there is some relative who is in some way abnormal, which might also apply to the families of the control group.

Parental Preference.

Freud[1] has emphasised that homosexual men have experienced a specially strong fixation in regard to the mother, whereas the eidolic female, according to Hoch and Zubin[2], usually harbours bitter resentment against her father or mother or both, "because they denied her their affection, and preferred a son." Landis et al[3] found that the majority of 'Masculine Protest' type of women preferred their fathers, and add that the inability to feel love or affection for either parent has been considered by many psychiatrists as a source of emotional insecurity and instability. In testing these statements, Terman and Miles[4] found that in eight of their 18 cases of homosexual males (approximately 44%) the relationship between mother and son is described as very close or intimate, and in no case as distant or casual; no father was the preferred parent. Jonas[5] also found that 43 of his 60 cases of homosexual males (approximately 72%) preferred the mother, only one expressing a preference for the father, as against 18 and 9 respectively in his control group. The unmarried women in both the sexually normal and abnormal groups studied by Landis et al[6] had the same parental preference, 44% preferring the father and 22% liking both parents equally well.

Contrary to Freud's statement above, and Brill's contention[7] that mother fixation is a factor common to nearly all male homosexuals, only 28 of the homosexual males here interviewed stated a definite preference for the mother; 13 of these also preferred the female rôle in their sexual relationships, 11 were aggressive and masculine, and four had no preference with regard to sexual rôle. Only four of the entire male group expressed their fondness for the mother in strong terms, and in only one case was the father the preferred parent. The emphatic expressions of love were: (1) devoted; (2) adore her; (3) mad about her; (4) relationship complicated and emotional, love for her almost unnatural.

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[1]Freud, Internat. J. Psychoanal., Op. Cit., p. 148.
[2]Hoch and Zubin, Op. Cit., p. 183. [3]Landis et al, Op. Cit., pp. 154, 183.
[4]Terman and Miles, Op. Cit., pp. 317, 318. [5]Jonas, Op. Cit., pp. 626 - 633.
[6]Landis et al, Ibid, p. 46. [7]Brill, 1934, Op. Cit., p. 960.

Fear or active dislike of either the mother, stepmother or adoptive mother was expressed by only three men and three women, of the father by six men and six women, and of both parents by two men and two women. Twelve men and eight women expressed no preference for either parent. The active, aggressive female homosexual who might be considered the Masculine Protest type did not, as postulated above, express in relation to the total 'active' group an overwhelming preference for the father; the proportion of father to mother preference in this group was ten to eight, although the proportion in the balance of the females was four to ten. The question was not applicable to the remaining 15% of the entire group as either one parent or both were dead.

Preferred Parent.

| | MALE SUBJECTS | | | | | FEMALE SUBJECTS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Prefers active rôle. | Prefers passive rôle. | No preferred rôle. | Total | % | Prefers active rôle. | Prefers passive rôle. | No preferred rôle. | Total | % |
| Preferred Mother | 11 | 13 | 4 | 28 | 65 | 8 | 5 | 5 | 18 | 43 |
| Preferred Father | 1 | | | 1 | 2 | 10 | 3 | 1 | 14 | 33 |
| No preference | 4 | 5 | 3 | 12 | 28 | 5 | 1 | 2 | 8 | 19 |
| Disliked both | 1 | 1 | | 2 | 5 | 1 | | 1 | 2 | 5 |
| | | | | 43 | | | | | 42 | |
| Never knew Mother | | | | 1 | | | | | 2 | |
| Never knew Father | | | | 6 | | | | | 5 | |
| Never knew either | | | | 4* | | | | | 3* | |

*4 men and 2 women expressed their preference in terms of adoptive parents or guardians.

TABLE II.

The relationship with the same sex parent in many cases was difficult, 15 males and 12 males reporting this fact in such terms as fear, strain, quarrelling, lack of understanding, friction, antagonism, jealousy, irritation, etc.; the same difficulties with opposite sex parents were only reported by five men and one woman. Far from having a cross- or same-parent

fixation, the relationship between subject and parents in 57% of the entire group was described in casual or indifferent terms, even when a preference for one parent was stated. The descriptions used were such as normal, usual, reasonable, not over-fond, indifferent, all right, fair, quite good, etc., and were given by 35 men and 22 women; they applied in each sex more to the father than to the mother, 19 men and 16 women applying such terms to the father.

In the normal course of psychosexual development, the child should identify itself with the same-sex parent, and where this does not occur either cross-parent fixation or failure to identify at all may result, with the consequent development of emotional insecurity and/or instability in the individual. If early childhood parental preference may be taken as an indication of identification, very few of the subjects here interviewed appear to have followed the normal course of psychosexual development. The indifference towards the parents, plus active dislike of both parents (which together comprise 61% of the entire group's relationship with the parents), is more apparent in this survey than is cross-parent fixation. This indifference or lack of identification may constitute the "inability to feel love or affection for either parent" previously referred to by Landis et al[1] and may well be considered a factor equally as important as cross-parent fixation in the ætiology of emotional immaturity which is believed to be common to all homosexuals. The data here indicate that, particularly in the case of females who are more dependent emotionally in human relationships than men, it is perhaps a more important factor than cross-parent fixation. In any case, lack of identification may be considered as an important additional or parallel factor in the ætiology of homosexuality.

Siblings.

The number of male and female siblings in the families of homosexuals has been previously quoted and studied in relation to the expected population ratio of 106 males : 100 females[2]. The sibling relationship given by Henry[3] is not considered here in detail as his subjects are sex deviants and not all homosexuals.

Of the 100 cases under review, there were 14 sibling births of unknown sex, these children having died in infancy before the birth of the subject. Excluding these 14 births, the total number of male siblings in

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[1] Landis et al, Op. Cit., p. 183. See p. 80.

[2] See pp. 27 ff.

[3] Henry, 1950, Op. Cit.

the families of the entire group is 146, and of female siblings 138, giving a ratio of 105.79:100 male:female births. This approximates closely to the South African European population ratio, based on 721 files of English speaking subjects drawn from the National Institute for Personnel Research, of 101.86:100. The sibling ratios are shown in Table III.

Sibling Ratios.

| | N | Male siblings | Female siblings | Ratio Male:Female |
|---|---|---|---|---|
| N.I.P.R. male cases | 417 | 670 | 618 | 108.4 :100 |
| N.I.P.R. female cases | 304 | 421 | 453 | 92.9 :100 |
| N.I.P.R. total population | 721 | 1091 | 1071 | 101.86:100 |
| Test group male cases | 50 | 74 | 76 | 97.3 :100 |
| Test group female cases | 49* | 72 | 63 | 114.3 :100 |
| Total test group | 99 | 146 | 139 | 105.04:100 |
| Control group male cases | 50 | 85 | 97 | 87.6 :100 |
| Control group female cases | 49⁂ | 79 | 78 | 101.3 :100 |
| Total control group | 99 | 163 | 175 | 93.14:100 |

*Two subjects in the female test group were sisters. These siblings, therefore were only counted once.
⁂Number of siblings in one control case not recorded.

TABLE III.

Although the test group subjects appear to have proportionately more siblings of the opposite sex than the general population, these may be chance deviations due to the small number of subjects involved, particularly since the control group of similarly small numbers does not follow the general population trend. If a comparison may be made between these 50 male cases and Lang's 1,015 male cases, the trend here (97.3:100 male:female siblings) is in the opposite direction from that of Lang's subjects (121.1:100 male:female siblings), but again this is doubtless a chance deviation due to the small numbers involved. No definite conclusions therefore may be drawn from this survey in regard to the theory of hereditarily determined homosexuality as explained by a genetic mechanism.

Size of family has occasionally been mentioned in connection with homosexuality. Dickinson and Beam[1], for example, found that there were not many brothers and sisters. Kahn, on the other hand[2], found that the majority of histories obtained from the homosexuals on Blackwell's Island penitentiary showed that their parents had had large families; some of his cases had a

[1]Dickinson and Beam, Op. Cit., p. 209. [2]Kahn, Op. Cit., p. 39.

total of 18 or 20 brothers and sisters, and 6 to 12 were quite common. The average number of children per family of the 721 cases taken from the N.I.P.R. general population files was 3.99; the test group average was 4.0 and the control group 4.49. Some very large families were found in all three groups, but in the homosexual group, contrary to Kahn's finding, only 13 subjects had six or more brothers and sisters, as compared with 22 of the control subjects. These comparisons are shown in Table IV below.

Number of Births per Family.

| | N.I.P.R. Population N = 721 | | | | Test Group | | | Control Group | | |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of children in family | Male sub-jects | Female sub-jects | TOTAL | % | Male sub-jects | Female sub-jects | TOTAL | Male sub-jects | Female sub-jects | TOTAL |
| 1 | 28 | 28 | 56 | 7.8 | 6 | 7 | 13 | 3 | 7 | 10 |
| 2 | 83 | 67 | 150 | 20.8 | 9 | 7 | 16 | 9 | 8 | 17 |
| 3 | 95 | 73 | 168 | 23.3 | 11 | 11 | 22 | 6 | 8 | 14 |
| 4 | 66 | 48 | 114 | 15.8 | 7 | 14 | 21 | 9 | 7 | 16 |
| 5 | 50 | 34 | 84 | 11.7 | 7 | 2 | 9 | 11 | 5 | 16 |
| % 5 or less | | | | 79.3% | | | 81.8% | | | 73.7% |
| 6 | 39 | 15 | 54 | 7.5 | 3 | 2 | 5 | 0 | 4 | 4 |
| 7 | 21 | 12 | 33 | 4.6 | 2 | 3 | 5 | 3 | 2 | 5 |
| 8 | 17 | 7 | 24 | 3.4 | 1 | 0 | 1 | 4 | 3 | 7 |
| 9 | 7 | 9 | 16 | 2.2 | 2 | 1 | 3 | 2 | 2 | 4 |
| 10 | 3 | 8 | 11 | 1.5 | 1 | 0 | 1 | 1 | 2 | 3 |
| 11 | 3 | 1 | 4 | 0.6 | 0 | 0 | 0 | 2 | 0 | 2 |
| 12 | 1 | 1 | 2 | 0.2 | 0 | 1 | 1 | 0 | 1 | 1 |
| 13 | 3 | 1 | 4 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | 0 | 0 |
| 18 | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | 0 | 0 |
| | 417 | 304 | 721 | | 50 | 49* | 99 | 50 | 49⌘ | 99 |

* One subject reared in an orphanage, number of siblings unknown.
⌘ One control subject, number of siblings not recorded.

TABLE IV.

As far as size of family is concerned, therefore, the homosexual group on the average is almost identical with a cross section of the general population. The larger number of only children in the test group may be accounted for by the comparatively high proportion of adoptions among these subjects. Six of the homosexual subjects were adopted or reared in an orphanage from infancy. If these six are deducted from the test group total of 13 only children, the number of actual single births in this group is reduced to seven, which is comparable to the 7.8% of the general population cross-section.

Position in Family.

Limited information is available on family positions of homosexuals, but Dickinson and Beam[1] found the typical position of the homosexual woman to be that of the eldest or only daughter, seven of their 18 cases being oldest daughters; three were only children and two the only adopted child; two were only daughters in families who had sons, and two the younger of two girls; 12 had no brothers and one only a younger brother who died in childhood. In their case studies of male homosexuals, Terman and Miles[2] found that five out of 18 cases (27.8%) were only children, three were eldest children and four were youngest; at the same time[3], in the course of their survey they found no evidence to support the popular view that girls who have many brothers but no sisters are masculinised, or that the reverse effect is very marked in the case of boys. In 60 cases of male overt homosexuality, Jonas[4] found 28 of these (46.6%) to be only or youngest children.

Of the group under discussion, only five females and six males were actually reared as only children. Of the females, one was an only adopted child, and of the males two were adopted as only children and in two cases the other child (one an older and one a younger brother) died in infancy. This percentage is low when compared with the figures quoted above. Among the females, four families comprised all girls, one subject being the elder of two daughters and one the youngest of five. Among the males, there were 11 families comprising all boys; of these, five subjects were the elder of two sons, two the younger of two sons, and two the youngest of three. Where there were more than three children in the family, eight males and three females were the eldest child (one of these females having a twin brother), and eight males and ten females were the youngest child (one male being one of triplets).

Taking into account the death of siblings in infancy, and the inclusion of adoptive and/or step-siblings, of all families comprising two or more children, 13 females and 12 males were reared as eldest children, and 21 females and 15 males as youngest children. Thus of the entire group, 46% were brought up as only or youngest children, which is in agreement with Jonas' finding quoted above. It should be noted, however, that 37% were brought up as only or eldest children. In other words, 72% of the group were either eldest, youngest or only children; of the balance of 28, 16 were next to the youngest and there was frequently a long gap, varying from one to 14

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[1]Dickinson and Beam, Op. Cit., p. 208.

[2, 3]Terman and Miles, Op. Cit., pp. 317, 228

[4]Jonas, Op. Cit., pp. 626 - 633.

years with a mean of 4.75 years, between this child and the last. This means that, in effect, this child had enjoyed for a number of years all the privileges of being the baby of the family, only to find himself superseded by another sibling. From this it would appear that the middle children of a family are less likely to become homosexual than those appearing in any other position; the family position that appears to be most vulnerable to homosexual conduct is that of youngest child.

Position in Family.

| Reared as* | Test Group | | | Control Group | | |
|---|---|---|---|---|---|---|
| | Male subjects | Female subjects | Total | Male subjects | Female subjects | Total |
| Only child | 6 | 5 | 11 | 3 | 7 | 10 |
| Elder or eldest | 12 | 13 | 25 | 8 | 15 | 23 |
| Middle of family | 17 | 11 | 28 | 26 | 20 | 46 |
| Younger or youngest | 15 | 21 | 36 | 13 | 7 | 20 |

* Excluding siblings who died in infancy and including adoptive, step- and half-siblings.

TABLE V.

There were six sets of twins and one of triplets among the siblings of the test group, all except one set of twins occurring among the siblings of the male subjects; in the control group, there were four sets of twins among the siblings, all except one set occurring among the siblings of the female subjects.

There were seven families among the test group females where the subject was the only girl among three or more children. Of these, five of the subjects prefer the active or masculine rôle in homosexual relationships, one prefers the passive or feminine rôle and the other expresses no preference. There was only one case where a male subject was the only boy, having one younger and three older sisters; in his homosexual relationships he is the active or aggressive partner.

As far as the general family background is concerned, a few points emerge in connection with the group being studied.

(1) 21 of the subjects were from normal families with no known instability amongst the relatives. In 10.6% of the cases, there appeared to be an unusually large number of relatives who were unstable or abnormal in some way.

There does, therefore, appear to be some justification for the theory that homosexuals may have an unstable hereditary background, but it must be remembered that they may equally spring from completely normal families with no known hereditary taint. In the former cases, homosexuality may be a symptom of neurotic personality; in the latter cases there is no apparent connection between family instability and the subject's homosexuality. It cannot therefore be assumed that all homosexuals are from stock that is largely degenerate or unstable, since in this survey such a generalisation is unwarranted, the assumption being applicable to only 10.6% of the subjects interviewed.

(2) 28 males expressed a preference for the mother, and one for the father; 10 and 14 of the females respectively expressed such preference. 23.5% of the entire group expressed no preference, and 4.7% expressed active dislike of both parents. Cross-parent preferences in both sexes combined comprise just under 50% of the entire group. Contrary to widely held psychoanalytic theories, a mother fixation is not an inevitable factor amongst male homosexuals. In only four cases was the preference for the mother expressed in strong terms by male subjects and in two cases for the father by female subjects. Relationship with the same-sex parent was difficult in 27 cases, suggesting possible rivalry for the other parent. 57% of the entire group described their relationship with the parents in casual or indifferent terms, this applying more frequently to the father than to the mother. This indifference is far more pronounced than cross-parent fixation, at least on the conscious level of the subjects.

It should not therefore be assumed that all male homosexuals are inordinately fond of the mother, even when she is the preferred parent, or that all 'Masculine Protest' type of female homosexuals either prefer or resent the father, since such a generalisation has not emerged from this study. More prevalent, but still not conclusive, is the suggestion of lack of identification which might tend towards narcissistic choice of love-object and thus to homosexuality.

(3) The over-all group ratio of male to female siblings is 105.79:100 males:females, but it is felt that the number of cases surveyed is too small for any valid conclusions to be drawn. The trend, however, is for proportionately more opposite-sex siblings. This is contrary to expectation as expressed in the genetic theory, which suggests that many homosexual males should have been females, thus reducing the proportion of male births to the expected ratio of 106:100 males:females.

(4) 81.8% of the homosexuals came from families comprising five or less

children, comparing favourably with a cross section of the general population. Average size of family is the same for the test group and the general population.

(5) 72% of the homosexual group were eldest, youngest or only children; a further 16% had enjoyed the position of youngest child for a number of years before being ousted from that position by another birth.

## 2. Environmental Background.

### Urban/Rural.

The pre-adolescent and adolescent period of life between the ages of 12 and 18 years is considered by Kinsey et al[1] to be of maximum importance in the shaping of sexual patterns in an individual, and in considering the urban or rural background of a person they accept as "urban" those who have lived in cities or towns for the major portion of this period. Loeser also mentions the influence of factors at work during the formative stage of psychosexual development[2], but in his assessment of 16% sexual psychopaths from rural, 63% from urban and 21% from mixed homes, he does not state which period of life he is considering as this formative stage.

Of the present test group, the majority have lived in cities or large towns up to, and beyond, the age of 18. The figures are shown in Table VI.

Urban/Rural Background.

| | Urban | | | Rural | | | Mixed. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Birth to 11 yrs. | | | | | | | | | |
| Test Group | 35 | 33 | 68 | 7 | 10 | 17 | 8 | 7 | 15 |
| Control Group | 26 | 34 | 60 | 10 | 5 | 15 | 14 | 11 | 25 |
| 12 - 18 yrs. | | | | | | | | | |
| Test Group | 42 | 38 | 80 | 6 | 8 | 14 | 2 | 4 | 6 |
| Control Group | 39 | 40 | 79 | 8 | 5 | 13 | 5 | 3 | 8 |

TABLE VI.

[1] Kinsey et al, 1948, Op. Cit. p. 682; and 1953, Op. Cit., p. 55.

[2] Loeser, Op. Cit., pp. 92 - 101

Of the 14% who lived in rural areas between the ages of 12 and 18, it is interesting to note that once they gravitated to an urban area they somehow became known to other homosexuals. All of them had been aware of their homosexual inclinations before this, although not all had had overt homosexual experience.

Early Domestic Environment.

Parents.

In only 13 cases was the subject's mother older than the father, and never by more than four years. The actual differences in ages where the father was older than the mother are distributed as shown in Table VII.

Differences in Parents' Ages
where Father is Older than Mother.

| Difference in years | N Male subjects | N Female subjects | Difference in years | N Male subjects | N Female subjects |
|---|---|---|---|---|---|
| 0 - 2 yrs. | 8 | 9 | 7 - 8 yrs. | 5 | 4 |
| 3 - 4 " | 9 | 8 | 9 - 10 " | 1 | 4 |
| 5 - 6 " | 7 | 11 | 11 - 12 " | 2 | 2 |
| Total 0 - 6 | 24 | 28 | Total 7 - 12 | 8 | 10 |
| 13 yrs. | 1 | 1 | Comments. | | |
| 15 - 16 " | 2 | 0 | | | |
| 17 " | 1 | 0 | | | |
| 20 " | 0 | 1 | Family includes suicides, psychotics, alcoholics, other homosexual and mentally retarded members. | | |
| 22 " | 1 | 0 | Mother aged 18, father 40, at subject's birth. Divorced 10 years later. Father committed suicide at 69. | | |
| 27 " | 1 | 0 | Parents separated when subject was $2\frac{1}{2}$ years old. | | |
| 38 " | 0 | 1 | Father aged 78 at subject's birth. Parents separated $2\frac{1}{2}$ years later. | | |
| Total 13 yrs. or more | 6 | 3 | | | |
| Unknown | 4 | 4 | | | |

TABLE VII

The majority of subjects were born when the father was between the

ages of 25 and 44, and the mother between the ages of 20 and 39. Nine subjects were born when the mother was between 40 and 44 years of age, one mother being 45, one 46 and one 49; of the fathers, four were 45, two 46, two 48, two 49, four in their 50's and one 78 when the subject was born. The test group subjects, therefore, are not predominantly the children of elderly parents; in 52 cases, the difference between the parents' ages was not more than six years. In seven cases the parents were of different nationalities.

Parental Relationships.

Defective family, and particularly parental, relationships have been quoted as important factors in different types of aberrant behaviour including juvenile delinquency[1], psychotic behaviour[2] and schizophrenia[3] as well as homosexuality[4]. Incompatability between parents may lead to divorce or separation, or to an unhappy and unstable home environment in which the child feels insecure and finds difficulty in making a good emotional adjustment. It may lead to over-protection or rejection by one parent, or an ambivalent and bewildered attitude by the child towards the parents. As Kimball Young points out[5], however, it is not possible to generalise on the effects of either divorce or of a home of disharmony on the children; the possible disorganising influence of the former, with the likelihood of the introduction of a step-parent, must be matched against the deleterious effect of unhappiness and conflict in unbroken homes.

In the cases under review, 15 subjects reported friction between the parents although they were never divorced or separated. Sometimes this report was couched in such terms as "constant arguments, fights, squabbles, rows," etc.; others said their parents were "on the verge of separation, but patched it up", or "were always threatening divorce", or "it would have been better if they had been divorced"; in some cases the parents lived in the same house until the children left school, and were then divorced; but in all 15 cases there was a very unhappy atmosphere in the home due to excessive friction between the parents.

There were 45 cases in which the home was disrupted before the

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[1] Sir Cyril Burt, The Young Delinquent, 4th Ed., London, Univ. of London Press, 1945.

[2] Ruskin, Op. Cit., p. 955.

[3] B. W. Murphy, The Genesis of Schizoid Personality: A Study of Two Cases Developing Schizophrenia, Psych. Quart. 26:3, 1952, pp. 450 - 461.

[4] Henry, 1937, Op. Cit., p. 902; Dickinson and Beam, Op. Cit., pp. 209, 203; Allen, 1949, Op. Cit., p. 276; Jonas, Op. Cit., pp. 626 - 633.

[5] Kimball Young, Op. Cit., pp. 552, 558.

subject reached the age of 17. The home was considered disrupted in such cases as divorce, separation of parents, desertion by father, death of one or both parents (with or without remarriage), and when a parent was unable to look after the child owing to drug addiction, institutionalisation for psychosis, alcoholism, or similar reasons. The death of one or both parents occurred in 28 cases, disruption of the home through divorce, separation or desertion in 14 cases, and from other causes in three cases. In those histories of adoption where the child had no memory at all of its true parents, the above information refers to adoptive parents. In a few instances, the child's life was disrupted on more than one count, for example if the parents died, the child was adopted and the adoptive parents divorced; or if the parents were divorced, the mother remarried and then died. In these cases, only the first disruption was counted. These figures (45%) may be compared with Loeser's finding[1] of 41% sexual psychopaths in the military service from homes broken by divorce, separation or early deaths, and with Terman and Miles[2] who found divorce or separation in 8.5% of their 70 cases of male homosexuals.

It will be seen, therefore, that out of the hundred cases here reviewed, 60 subjects were brought up in homes that were either unhappy or disrupted. This percentage might appear to be relatively high and therefore indicative of an ætiologic factor; but it does not explain (a) why the children of such homes should turn to homosexuality rather than to any other type of abnormality or possible compensation, or (b) why the remaining 40 subjects (24 of whom are males), who were all brought up in what were apparently normal, happy, unbroken homes, should also have turned out to be homosexual.

In reviewing the subject-parent relationships in these 40 cases, the following points emerge:-

Males. (Total 24.)

(1) 14 were not on good terms with the father. Although phrased in various ways, there was little doubt about the lack of rapport between father and son in these cases. "I was scared of my father" (paternal grandparents in this case were cousins); "Our ways were parallel - we never came together" (here a paternal aunt and uncle were both psychotics who committed suicide); "My adoptive mother idolised me, and my adoptive father was jealous"; "I was always irritated by my father"; "My father was antagonistic to me" (two cases); "Father had head wounds and used to fly into tempers" (brother had had a nervous breakdown); "I didn't get on well with father" (two cases. Mother dominant and possessive in one of these cases, homosexuality on the

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[1] Loeser, Op. Cit., pp. 92 - 101.

[2] Terman and Miles, Op. Cit., p. 246.

paternal side of the family in the other case); "Father was almost a stranger to me - I patterned myself on my elder sister"; "I was never friendly with my father, he was very strict and dominant"; "Father said I was a sissy"; relationship with the father was described in other cases as "fair only"; "very difficult because of my almost unnatural love for mother"; and "very indifferent - I seldom saw him as a child".

(2) Two subjects were quite unemotional about both parents, one describing his relationship with both as "indifferent", and the other with his father as "fairish" and with his mother, "We got on quite well in an off-hand way." One stated that he hated both his parents and despised their way of living.

(3) One subject admitted that although he liked and respected his father, he was "always mad about mother."

(4) In one case the maternal grandparents were cousins, and in another both the father and two paternal aunts were described as "lop-sided hunchbacks". (Query acromegaly?)

(5) In the remaining four cases there appeared to be nothing unusual or abnormal in the family or family relationships.

Females. (Total 16.)

(1) Poor relationship with the same-sex parent was expressed by four subjects, described as "friction with mother" (combined with fear of father); relationship with mother "not good" (plus extreme jealousy and hatred of an elder and only surviving brother); "never close to either parent, but at loggerheads with mother" (this subject was sent to live with her grandparents for about two years between the ages of 8 and 10 because her parents thought she was 'difficult'); "loved my adoptive father and thought he was wonderful, but did not like my adoptive mother because I felt that she treated him badly."

(2) In six cases the mother seemed to be the dominant parent. She was described as "the stronger personality" (this subject was the youngest of 17 children in what she says was a 'very happy home'); and as "dominant and possessive" in five cases (two were sisters who were strictly disciplined by their maternal grandmother, the maternal grandfather having committed suicide; one subject added "but not affectionate"; another commented that "father was weak and I had fights with mother because we had the same personalities"; in one case "mother word the pants" and this subject was "not over-fond of father who was a heavy drinker like his mother", and there was general instability in the family - two paternal great-uncles were mentally defective and a maternal

great-uncle had been gaoled and finally committed suicide.)

(3) One subject got on "reasonably well" with her father but "very well" with her mother; one said, "Father treated me like a son and mother treated me like a daughter - I was always supposed to have been a boy"; and a third said that her father, who had three children by his first wife, was indifferent to her, she was unhappy with her step-siblings and at the age of 9 was sent to live with her grandmother who never showed her any affection or understanding.

(4) In one case the father's half-brother had committed suicide, and in another family there were "several" alcoholics, suicides, psychotics and other homosexuals. In only two cases was there no apparent abnormality in either the family or family relationships.

The findings regarding the early domestic environment of the homosexual group are summarised in Table VIII. In the 34 cases where the home was neither disrupted nor unhappy, but appeared to be normal, other factors which emerged are summarised under the heading C.

Parental Relationships.

| | No. of Cases |
|---|---|
| A. Friction between parents ... ... ... ... ... | 15 |
| B. Disrupted homes due to: | |
| (a) death ... ... ... ... ... ... ... | 28 |
| (b) divorce, separation or desertion ... ... | 14 |
| (c) other causes ... ... ... ... ... ... | 3 |
| Total Disrupted Homes . ... | 45 |
| Total Disrupted or Unhappy Homes | 60 |
| C. Homes neither disrupted nor unhappy: | |
| (a) Poor relationship with same-sex parent . ... | 18 |
| (b) " " " opposite-sex parent ... | 2 |
| (c) Mother dominance with a weak or absent father | 6 |
| (d) Indifference to or dislike of both parents ... | 3 |
| (e) Abnormalities in the family ... ... ... | 4 |
| (f) Confused sexual self-identification ... ... | 1 |
| Total (a) to (f) ... ... | 34 |
| (g) Nothing abnormal or unusual in family or family relationships ... ... ... ... ... | 6 |
| Total Homes neither Disrupted nor Unhappy ... ... ... | 40 |

TABLE VIII.

It is possible that the six subjects listed under (g) in Table VIII were not as frank as the other 94, but they answered all other questions openly and did not give the impression of being reticent or deceitful. It is also possible that the same questions would have elicited the same information from the control group had they been asked. No attempt therefore has been made to proffer the above findings as a comparison with a random sample of the normal population, but they are merely stated as being factual.

Occupational Class of Parents.

The socio-economic background of the present group is very mixed, from the poor to the very wealthy, and is based on the father's occupation. Just over a half of the subjects (54%) came from homes that were in the professional or otherwise upper strata of society, and 43% from the artisan or middle strata; the remaining 3% knew nothing of their fathers' occupations. Included in the first group are fathers who were engineers, surgeons, accountants, manufacturers, artists and company directors amongst others, and in the second group are miners, carpenters, turners, general dealers, store managers, clerks, draughtsmen and the like.

There appears in this sample to be no correlation, therefore, between the occupational classes of the homes in which these subjects were raised and their homosexuality. This finding agrees with that of Kinsey et al in their report on female homosexuals[1].

First Homosexual Experience.

Homosexual seduction in early youth or childhood has been rated as a particularly important factor in the development of homosexuality; Taylor[2] found this to be the commonest single environmental factor, with employment in hotels or public houses as the second most frequent. Westwood[3] says that the records of psychiatrists show that over 90% of the homosexual cases start by seduction. He goes on to point out, however, that the effects of an early seduction in an ordinary man should not be over-emphasised, the greatest danger being that it might alter the mental disposition of a boy. Whilst not denying that the first experience, or initiation, is an important stage in the life of a homosexual, he adds that some people develop so strong a homosexual tendency in early life that a seduction can be regarded as "merely the final stage in what would be the inevitable result." Although the seduction

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[1] Kinsey et al, 1953, Op. Cit., p. 461.

[2] Taylor, Op. Cit., pp. 525 - 529.

[3] Westwood, Op. Cit., pp. 45 - 47.

may be the turning-point in a number of histories, he argues that if the homosexual tendency is strong enough it will eventually come out in some form or other, whereas if it is weak the individual "will survive a seduction without disability." He quotes case histories to support this contention.

Regarding the age of onset of homosexuality, Hirschfeld[1] puts it at approximately 18 years, that is when heterosexuals develop "that ideal eroticism that manifests itself in exaggerated admiration, serenades, love-letters and love-poems", with the sole difference that the object of this 'deification' is a member of the same sex. Henry[2] found the average age of homosexual beginnings to be 20 years, "or later by two years than the average start of heterosexual relations." In his 60 cases of overt male homosexuals, Jonas[3] found the age of onset to be between 9 and 30 years, but does not give the mean age, whereas Hoch and Zubin[4] suggest that full development as a homosexual comes only when the individual identifies himself as one, "which typically coincides with his entrance into the homosexual world." This discounts all those homosexuals who never gravitate into any homosexual circle.

In her group of overt homosexual women, Davis[5] found that nearly a third had indulged in sex play with other girls in pre-adolescence, that nearly 80% maintained overt homosexual relations after colle_, and that 27½% never formed such friendships until after college. In her group whose intense emotional relations with other girls and women never passed into the overt stage, 50.1% had already experienced these feelings before entering college.

In the present group, the evils of early seduction and of the influence of a boarding school environment do not appear to be of paramount importance. Of those who stated that their initiation into homosexuality resulted from seduction, only four men and six women had no further comment to make; one man reacted hysterically after it (told his family and "cried himself to sleep for three nights", although the episode took place when he was 21 years old and the seducer was only slightly older), and one woman was "revolted"; five men and two women confessed that although they were seduced, they were quite willing for the act to take place; two men had previously indulged in sex play; and two had always been aware of their homosexual inclinations. The total number of seductions in the entire group was 13 males and 9 females, the mean ages at the time of seduction being respectively 16.6 years and 20.3 years, which is almost the same as the mean ages at which homosexual activity began in the rest of the group.

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[1] Hirschfeld, Op. Cit., p. 249.

[2] Henry, 1950, Op. Cit., p. 1081.

[3] Jonas, Op. Cit.

[4] Hoch and Zubin, Op. Cit., p. 234.

[5] Davis, Op. Cit., pp. 251, 249.

25 males and 11 females had their first homosexual experience whilst they were still at school; 16 of these men and 6 of the women were at boarding school at the time, whereas the others did not go to boarding school at all. The inference here is that girls are perhaps as likely to make overt homosexual contacts at a day school as they are at a boarding school, whereas boys are possibly more prone to indulge in homosexual experiments at a boarding school.

One striking difference between the sexes comprising the present group lies in the emotional attachments involved in the first homosexual experience. From earliest childhood, a boy is accustomed to seeing and handling his sex organs; in performing the natural functions of the body, the boy is more careless and casual whereas the girl is more discreet and secretive; she has nothing to see or handle; her sex is internalised, whereas the boy's is externalised. These sex differences are commented on by Searl[1] as follows: "We must also add, on the subject of looking and exhibiting, that the boy can not only expose his genitals more casually but with greater dignity, while with the girl it cannot be such a casual affair. An undignified posture and more complete uncovering are essential. The girl's natural tendency is to greater reserve and secrecy along these lines all through her sexual life, with less flippancy."

This externalisation of sex makes sex play for boys easier, simpler, more interesting and perhaps even more competitive, and therefore sex play becomes a matter of physical reaction with very little emotion attached to it. It may also explain why the males in the present group experienced their first homosexual experience at an earlier age than the females, the mean being 16.9 years as compared with 20.24 years, and why so few males admitted any emotions over the experience other than curiosity, interest, desire or something equally impersonal. Referring to the first homosexual experience, only three men admitted that they were in love with the partner, and these three were rather older than the majority when the event occurred; one had been repulsed by homosexuality until he fell in love at 15, one resented it at the age of 17 although he admitted childhood homosexual play, and had his first overt experience at the age of 30, and the third had indulged in pre-adolescent play but had his first experience at 22. Two others had emotional attachments to the partner, but were not in love. Of the women, on the other hand, 29 were in love with their first partner and 6 were emotionally attached. Where there were no emotions involved in the first homosexual experience, the mean

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[1] M. N. Searl, A Note on the Relation between Physical and Psychical Differences in Boys and Girls, Int. J. Psychoanal., 19, Jan. 1938, pp. 50 - 62.

age of the 30 men was 16.1 years, and of the 6 women 19.2 years. Only one man admitted having seduced his first partner at the age of 34, although the desire "had always been there from the age of nine." All five of the women who seduced their first partners did so because they were in love and in only two cases was the partner slightly younger.

These sex differences are shown in Table IX.

First Homosexual Experience.

| | Male | | Female | |
|---|---|---|---|---|
| | N | Mean age | N | Mean age |
| (a) Seduced ... ... ... ... ... | 13 | 16.6 | 9 | 20.3 |
| (b) (Seduced but willing) ... ... ... | (5) | | (2) | |
| (c) (Seduced but always aware of inclinations) | (2) | | | |
| (d) Seducer ... ... ... ... ... | 1 | 34 | 5* | 20.6 |
| (e) In love with partner ... ... ... | 3 | 22.3 | 24 | 19.4 |
| (f) With emotional attachments ... ... | 2 | 14.5 | 6 | 24.5 |
| (g) No emotions involved ... ... ... | 30 | 16.1 | 6 | 19.2 |
| (h) As long as he can remember ... ... | 1 | | | |
| | 50 | 16.9 | 50 | 20.24 |

*In love with partner.

TABLE IX.

It will be seen that the majority of men (70%; see (b) and (g) above) were in no way emotionally involved when they had their first homosexual experience, whereas the majority of women (70%; see (d), (e) and (f) above) were either in love with or emotionally attached to their first partner.

The main features which emerge from this comparison of the sexes may therefore be summed up as follows:-

(1) Men begin their homosexual contacts at an earlier age than women.

(2) Men experiment with sex, whereas women are more usually emotionally involved.

(3) Boarding school may expose either sex to greater opportunities for homosexual experience, but such experiences take place during the child's school life in almost as many instances at a day school.

(4) Seduction was not an all-important factor in the group as a whole. On the contrary, plain seduction occurred in only 13% of the cases (six males and seven females.)

Heterosexual Experience.

It is generally agreed that the number of people who are exclusively homosexual throughout their entire lives is very small[1]. Kahn[2] states that over 50% of homosexuals have at some time in their lives indulged in heterosexual acts prior to homosexual indulgences. Norwood East[3] explains that there is a certain type of personality which appears to have difficulty in developing the ordinary pattern of sexual behaviour and consequently tends to show primitive as well as ordinary sexual interests. After studying a group of adult homosexual males, Sessions Hodge[4] concludes that the great majority are true deviants from the heterosexual pattern, in whom this deviation has been present from a very early age and to whom heterosexuality is as repugnant and homosexuality as natural as homosexuality and heterosexuality are to a heterosexual group. He distinguishes between those who are concerned by their deviation and its inevitable restraints, and those whose behaviour may be described as licentious or vicious who comprise a social menace, and who have their counterpart amongst heterosexuals.

With regard to women, it is only in comparatively recent years that the term "old maid" has not carried with it a certain stigma of shame in our society. Women were neither trained nor expected to work, and the only course open to them was marriage, which carried social approval and gave them a certain security. Even here, however, a woman was not supposed to experience any pleasure in sex relations, and was expected to be much more chaste than her spouse. Two comments by Krafft-Ebing, published just over half a century ago, throw an interesting sidelight on the status of women at that time. He says[5], "Woman, however, if physically and mentally normal, and properly educated, has but little sensual desire... Woman is wooed for her favour. She remains passive. Her sexual organisation demands it, and the dictates of good breeding come to her aid." He states further, "The unfaithfulness of the wife, as compared with that of the husband, is morally of much wider bearing, and should always meet with severer punishment at the hands of the law."

It is possible for a woman to be sexually adequate to a man even if she herself is frigid; without active co-operation on her part she can conceive and bear children[6]; it has been stated by psychiatrists that many women,

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[1] See discussion pp. 2 ff.

[2] Kahn, Op. Cit., p. 62.

[3] Norwood East, 1947, Op. Cit., p. 12.

[4] Sessions Hodge, Op. Cit., p. 133.

[5] Krafft-Ebing, Op. Cit., pp. 14, 16.

[6] See discussion by Horney, pp. 22 ff.

even mothers of families, never achieve sexual gratification with their husbands. This fact, together with a certain carry-over from the first point mentioned above, may explain why some homosexual women are married, and why many have been married, whilst retaining their homosexual inclinations and contacts. Most of them experiment with heterosexual relations, but Ellis[1] and Landis et al[2] maintain that from the point of view of libidinal satisfaction derived from these heterosexual experiences, "they are still as homoerotically oriented as they were prior to such experiences", and "that the homosexual instinct seems usually to give the greater relief and gratification." To the homoerotic type of woman, other women have a strong emotional appeal, whereas they show little or no sexual interest in men.

Henry found[3] that 32 of his 40 women had had sexual experience with both men and women, "a situation which permits the 32 to make comparison of reactions and satisfactions in their experience of living and comradeship and sex play"; marriage was reported by nearly half, with ten having pregnancies, seven having children and six reporting a total of 11 abortions. Kinsey et al[4] also report a few case histories of completely homosexual females who, though not having coitus with their husbands, continued to live with them as a matter of social convenience. They add, "In some of these cases there were good social adjustments between the spouses even though the sexual lives of each lay outside of the marriage." Quite a few homosexual men have married homosexual women as a form of social protection, but in practice these marriages seldom last satisfactorily[5].

Many of the subjects comprising the present test group have either experimented with heterosexual relations or have made a sincere but unsuccessful attempt to live the normal lives demanded by their families and by our society. This applies particularly to the females, 18 of whom have been married; 12 of these marriages ended in divorce or separation, two were terminated by the husband's death, and of the four who are still married, two have homosexual husbands and one no longer has sexual relations with her husband; five of the marriages produced seven children, five being sons and two daughters, only one marriage producing more than one child. Two of the men had been married, one to a homosexual wife, and both were divorced within 18 months.

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[1] Ellis, Op. Cit., p. 261.

[2] Landis et al, Op. Cit., p. 154.

[3] Henry, 1950, Op. Cit., p. 1075.

[4] Kinsey et al, 1953, Op. Cit., p. 457.

[5] The writer is aware of seven such unions. One ended in the husband's death, one in divorce, in two cases the pairs are not living together, and three marriages were recently contracted.

Of the 20 men who had at some stage experimented with heterosexual relations, five had done so in their early youth but not since; one had tried on two occasions only, but found it unsatisfactory; two were seduced by married women, with unsatisfactory and emotionally upsetting results; one did so on the advice of a psychiatrist; two had their first experience in brothels during the war; one confessed that he had never had "normal" relations with a woman; three had tried, but one was not really interested, one "had to find out his own sex" and the other was impotent; two were merely curious; and two stated that it was unsatisfactory or not mentally satisfying. There were 21 men, with a mean age of 33.1 years, who had never had any heterosexual experience at all, so that 82% of the men in the test group were almost completely homosexual in their sexual experience; the balance merely replied in the affirmative when asked if they had ever had any heterosexual experience and did not qualify their answer in any way. Their preference, however, remains for homosexual contacts.

Twenth-seven women admitted heterosexual experience, but with qualifications. Five stated that the experience was emotionally sterile or physically unsatisfying; one "tried to try" once, and another at the age of 19 also tried, both in order to prove to themselves that they were not homosexual, but the latter found the experiment "unsavoury and distasteful"; one has been twice divorced and commented, "But man offers so little and wants so much. Look for perversions in so-called normal people"; six had had only one experience, one out of curiosity, one "very casually", one was seduced by a doctor to whom she went for advice about her homosexual inclinations, one because she was persuaded that it was the thing to do, one because she was curious, and one with a homosexual which proved a "romantic but unsatisfying experience"; one married at the age of 20 to escape from homosexuality, but was later divorced because of a woman lover, another was married at 19 and divorced after seven years, and a third was married very young because her people expected it of her but left her husband within two years for another woman; four married homosexual men; six others were divorced or separated from their husbands. There were 18 women, with a mean age of 32.6 years, who had never had any sexual experience with men, making a total of 90% of the group w o were almost completely homosexual in their sexual experience or mentality and desires. The balance of 10% merely stated that they had had heterosexual experience and did not elaborate on their reply.

Of the hundred subjects interviewed, therefore, all of them state that they are homosexual, and none would rate less than four on Kinsey's homosexual-heterosexual rating scale[1]. 86% of the entire group would be rated

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[1] Kinsey et al, 1953, Op. Cit., p. 470.

five or six. (See Table X below.)

Heterosexual Experience.

| Kinsey's Rating Scale | | Male sub-jects | Female sub-jects | TOTAL | % |
|---|---|---|---|---|---|
| 6 | Entirely homosexual | 21 | 18 | 39) | |
| 5 | Largely homosexual, but with incidental heterosexual history ... ... ... | 20 | 27 | 47) | 86% |
| 4 | Largely homosexual, but with distinct heterosexual history ... ... ... | 9 | 5 | 14 | |
| | | 50 | 50 | 100 | |

TABLE X.

3. Educational Background.

At the time of testing, the educational standard of the subjects ranged from standard six (five subjects) to post-graudate study, 44% of the group never having matriculated. It is notable that seven of the women, and only two men, advanced their education by their own efforts; two women moved from standard six to standards eight and ten respectively, one from standard seven to matriculation, and four from matriculation to university at the ages of 26, 35, 40 and 42 respectively. The men advanced from standard seven to matriculation by attending night classes, and from matriculation to C.I.S. by part-time study. Many members of both sexes, however, took additional courses after leaving school, such as commercial training of some sort (eight females and four males), elocution or music diplomas (F.T.C.L., L.T.C.L., L.R.A.M., etc.), art and language classes, ballet dancing and apprenticeships. In the control group, the men seemed more ambitious than the women; three men moved from matriculation to C.I.S. by correspondence, and one took an engineering degree; one advanced from standard six to P.T.C. (equivalent to a technical standard seven), one each from standards six and seven to N.T.C. I (equivalent to technical standard eight), one from standard eight to N.T.C. II (equivalent to technical standard nine), and two from standard eight to A.T.C. I and A.T.C. II (equivalent to one and two years' university training respectively). Of the women in the control group, two advanced from standard eight to commercial standards nine and ten respectively, and two qualified nursing sisters obtained their Diploma in Nursing. Additional courses were taken by both sexes, including courses in mining (four men), surveying and banking, and in various commercial subjects involving from three to 24 months' study. Table XI

shows the standard to which the subjects were educated by their parents and the final standard achieved.

Of the women comprising the test group, only 50% had reached matriculation standard or higher. This is contrary to the findings of both Davis[1] and Kinsey et al[2]. The former found 69.1% of her 1,000 cases to be college graduates and added, "Conversely those without college degrees have a significantly lower membership in these two groups" (homosexual experiences with and without overt practice) "than their numbers in the total group would warrant. This is particularly true of the H II group" (overt homosexuals) "where the percentage of non-college women is only 15.3% as against 30.9% in the entire group." Kinsey et al similarly found a higher incidence of homosexual responses among better educated females; they state, "At 30 years of age, for instance, there were 10% of the grade school sample, 18% of the high school sample, 25% of the college sample and 33% of the graduate group who had recognised that they had been erotically aroused by other females." Incidence of overt contacts at the same age were 9%, 17% and 24% respectively.

Educational Standard.

| | Test Group | | | | Control Group | | | |
|---|---|---|---|---|---|---|---|---|
| | Educated by parents | | Final standard achieved | | Educated by parents | | Final standard achieved | |
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Std. 6 | 3 | 4 | 3 | 2 | 5 | 2 | 3 | 2 |
| " 7 | 5 | 7 | 4 | 6 | 4 | 6 | 4 | 6 |
| " 8 | 9 | 11 | 9 | 12 | 10 | 14 | 9 | 12 |
| " 9 | 3 | 5 | 3 | 5 | 2 | 5 | 3 | 5 |
| Less than Std. 10. | 20 | 27 | 19 | 25 | 21 | 27 | 19 | 25. |
| Std. 10 | 17 | 14 | 17 | 12 | 21 | 14 | 17 | 12 |
| " 10 plus* | 5 | 2 | 6 | 4 | 2 | 3 | 6 | 4 |
| University graduate | 8 | 7 | 8 | 9 | 6 | 6 | 8 | 9 |
| TOTAL | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |

*Matriculation plus further specialised training such as C.I.S., or one or more years completed and passed at a university without obtaining any degree.

TABLE XI.

It might be expected that homosexual women who recognise and acknowledge their inclinations at an early age might decide against marriage and

[1]Davis, Op. Cit., p. 308.

[2]Kinsey et al, 1953, Op. Cit., p. 459.

therefore acquire some form of training to ensure that they should be adequately self-supporting in later years. In this case, they would make some effort either to take a post-school course or to go to college or university. Contrary to this expectation, however, two women in the present group achieved only a standard six education, six went as far as standard seven, and twelve no further than standard eight. The mean school-leaving age for both sexes was just over 16 years, and for the control group 16.34 and 15.70 years for the males and females respectively.

It will be seen, therefore, that the present group is not predominantly made up of subjects with a low education, such as one might expect to find in a prison population, and neither does it comprise mainly a university population or pseudo-intelligentsia; the group, rather, is fairly representative of a cross-section of the community with perhaps a slight bias towards the better educated section. This bias, however, does not influence the results obtained on the Wechsler-Bellevue Test since the control group is made up of subjects of exactly the same educational standards.

## III. OCCUPATION.

### 1. Type of Occupation.

Homosexual men and women are to be found in every walk of life and in almost every occupation, trade or profession, but most writers agree with Ellis[1] that there are "certain avocations to which inverts seem specially called", the chief among these being the arts. Carpenter[2] wrote nearly half a century ago, "The Uranian temperament ... is exceedingly sensitive and emotional; and there is no doubt that going with this, a large number of the artist class, musical, literary or pictorial, belong to this description", and opinion seems to have remained unchanged since then. Ellis[3] believes that pure science has relatively little attraction for the homosexual, whereas the chief artistic interest lies in literature; Campbell[4] places the vocational choice of the invert typically in the field of music, histrionics, interior decorating, teaching, clerical and secretarial work, hairdressing, painting and dancing; Dickinson and Beam[5] found one in six of their cases working at the arts vocationally, the chief avocations being writing, painting, dancing and music, and they suggest that "making or appreciating a work of art renews life creatively, and constitutes vicarious sexuality and fertility."

The second most popular field to which homosexuals appear to be drawn is the humanities, particularly the women. Carpenter[6] postulates that "it is possible that the Uranian spirit may lead to something like a general enthusiasm of Humanity", and Davis[7] found the only occupation amongst her homosexual women which showed a significantly high percentage was social service, a finding which has been corroborated by Kimball Young[8]. Amongst his 40 women, Henry[9] found such a wide variety of vocations as to defeat statistical significance, but he states that 13 out of 18 were those of "mentally active pursuits", the list including designer, singer, actress, painter, pianist, business woman, editor and journalist.

Although the homosexual is frequently highly strung and sensitive, Carpenter[10] points out that he is by no means always dreamy, but is sometimes extraordinarily and unexpectedly practical and capable of commanding a positive enthusiasm among his subordinates in a business or military organisation. Among his sexual psychopaths in the army, Loeser[11] found indications of

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[1], [3] Ellis, Op. Cit., p. 293.

[2], [6], [10] Carpenter, Op. Cit., pp. 109, 116, 118.

[5] Dickinson and Beam, Op. Cit., p. 428.

[4] Campbell, Op. Cit., p. 176.

[7] Davis, Op. Cit., p. 278.

[8] Kimball Young, Op. Cit., p. 581.

[9] Henry, 1950, Op. Cit., p. 1075.

[11] Loeser, Op. Cit., pp. 92 - 101.

ability and technical skill above the average, particularly in stenographic, clerical, musical, dramatic, and special service activities, but claimed that the group was "lacking in temperament and skills necessary to the combat soldier."

An analysis of the occupations of the present test group in relation to the findings and opinions quoted above reveals that the majority of these subjects are employed either in the business world or in a clerical capacity, 43% of the group falling into this category (21 males and 22 females). 31% of the group followed some artistic calling such as art and elocution teaching, architecture, beauty demonstration, music salesmanship, etc.; 14% worked in humanitarian fields, 5% in other professions and 7% in technical and other occupations. Included under the heading "humanitarian" are the medical and medical auxiliary professions as well as teaching, nursery school teaching and social work. 12% of the group were or had been professional artistes, such as actors, stage managers, ballet dancers, musicians, producers, chorus girls and pianists.

Of the men, only 14 were employed in what might be considered typically feminine occupations, such as florist, milliner, dancing teacher, dress designer, ladies' hairdresser and display artist; of the women, seven had masculine occupations which included travelling saleswoman, company director, taxi driver, farmer, etc. This finding is contrary to expectation, but the subjects' interests, as distinct from their occupations, are discussed in a later section.

In selecting the control group for this study, an attempt was made to match the test group subjects not only by age and education, but also, as far as possible, by type of occupation. The exact occupations, of course, could not be matched, but by "type of occupation" is meant manual, clerical, professional, managerial, etc. For example, a male milliner, who uses his hands and works with small pieces of material, would be better matched by a dental mechanic than by a store manager; similarly, a female travelling saleswoman would be better matched by a floor manageress, who is a saleswoman with the additional responsibility of a floor, than by a nursery school teacher who is not related to the business world at all. From Table XII it will be seen that the greater number of male homosexuals who earned their livelihood in artistic fields is counterbalanced by heterosexual males employed in industry in some technical sphere, whilst the female homosexuals employed in artistic work are counterbalanced by the heterosexual women in business or clerical positions. Thus the relatively high number of homosexuals employed in the arts is not reflected in the general population where men are more

likely to be found in technical fields and women in business or in offices.

Type of Occupation.

| Type of Occupation | Test Group | | | Control Group | | |
|---|---|---|---|---|---|---|
| | Males | Females | Total % | Males | Females | Total % |
| Business ... ... ... | 17 | 10 | 27 | 10 | 13 | 23 |
| Clerical ... ... ... | 4 | 12 | 16 | 8 | 17 | 25 |
| Total Business/Clerical | 21 | 22 | 43 | 18 | 30 | 48 |
| Artistic ... ... ... | 20 | 11 | 31 | 1 | 2 | 3 |
| Humanitarian ... ... | 2 | 12 | 14 | 3 | 15 | 18 |
| Other Professional ... | 3 | 2 | 5 | 8 | 0 | 8 |
| Technical and Other ... | 4 | 3 | 7 | 20 | 3 | 23 |
| TOTAL ... | 50 | 50 | 100 | 50 | 50 | 100 |

TABLE XII.

There is no doubt whatsoever that a sample of homosexual males could be obtained who would be predominantly employed in artistic or typically feminine occupations. However, the intention of this survey was to obtain, if possible, a representative population cross-section of homosexual circles and to avoid bias by the introduction of too many obvious and effeminate types of males. It so happens that the 50 male cases here presented were not selected in any way and it is purely by chance that the list includes such people as mechanics, engineers and plumbers as well as professional actors and ballet dancers. Homosexual prostitutes were not encountered and the group here presented may be said to conform with the contention of Greenspan and Campbell[1] that "the homosexual leads a useful, productive life, conforming with all dictates of the community, except its sexual requirements."

2. Occupational Stability.

Kahn found[2] that his homosexuals, particularly the males, seemed to experience difficulty in adjusting themselves to their environments and consequently "almost every one of them drifted from one city to another and from one country to another always desiring and looking for something which they could not find." He adds, "As to their ambitions, they seldom show a real stable desire for something definite in life. In other words, they are more

[1] Greenspan and Campbell, Op. Cit., p. 682.

[2] Kahn, Op. Cit., pp. 46, 103.

or less indifferent, shiftless, 'haphazard', and undecided as to what they really want or desire." Cory, who is himself homosexual and moves in the homosexual world, says the homosexual's "entire life seems motivated by restlessness and characterised by rootlessness."[1] It is undeniable, as Carpenter has pointed out[2], that "there are numbers of merely frivolous, or feeble, or even vicious homosexuals, who practically do no useful work for society at all - just as there are of normal people", but these minorities should not be taken as typical of either the homosexual or heterosexual population as a whole. In fact, Dickinson and Beam[3] say in contradiction to the above statements that steady occupation is the rule, and Campbell, in refuting **any** suggestion that the homosexual should be classified as a psychopathic personality, states[4] "Whereas the psychopath is restless and unpredictable in his occupational record, the homosexual is almost invariably a conscientious, dependable worker." From these two directly opposite opinions, it may seem that the homosexuals discussed by Kahn and Cory may have been psychopathic types who would therefore probably have been "footloose" even if they had not been homosexual as well.

Of the present test group, nine males and ten females could be classified as "footloose", who changed their jobs frequently for no apparent reason other than desire for a change, boredom with the occupation or desire to travel; eight males and seven females in the control group could be similarly described. 20 males and 21 females have remained in the same profession or type of work throughout their entire lives, which may be compared with 19 and 28 respectively of the control group. Many of the homosexuals have launched out into the competitive business world on their own and become successful manufacturers, agents, business owners and the like; 14 men and 10 women are self-employed. This can only be said of two men and one woman in the control group, suggesting greater initiative, independence, self-reliance and self-confidence on the part of the homosexuals. Others have risen from junior posts to managerial, executive and other responsible positions. Changes of job have usually been for self-improvement and the group on the whole seems to be ambitious rather than "rootless", and certainly no more unstable as regards employment than the control group. This is shown in Table XIII overleaf.

The number of jobs held by each person ranges from one, held for 21 years, to 11, where the subject had a standard six education and a great deal of ambition and worked his way up in business from errand boy to buyer.

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[1] Cory, Op. Cit., p. 98. [2] Carpenter, Op. Cit., p. 108.

[3] Dickinson and Beam, Op. Cit., p. 203. [4] Campbell, Op. Cit., p. 183.

Exactly the same range is found in the control group, but here the subject who had had 11 jobs was "footloose" and changed his jobs for no particular reason each time. The average number of jobs per person is 3.38 and 3.62 for the males and females respectively and the average period per job 4.449 and 3.950 years respectively, ranging per individual average from 0.5 to 21.0 years for the males, and 0.5 to 14.5 years for the females of the test group; the range per individual average for the control group was from 1.1 to 21.0 years for the males and from 0.5 to 8.0 years for the females.

41 men and 41 women were of age to join the armed forces during World War II. Of the men, 27 were on active service, serving in combatant units such as the artillery, armoured cars and tanks, etc., as well as in the navy and as pilots and crew in the Air Force. Of the control group, 26 males were on active service. Two homosexual subjects were refused on medical grounds. Of the homosexual men, therefore, 70% of those eligible were either in or attempted to be in the armed forces. (No comparison should be made between the numbers of females who joined up as the majority of the control group had children and were therefore unable to leave home.) Only two of these 27 men returned to their former employment after demobilisation; had they not had to seek new employment then, the average number of jobs per person (males) would have been reduced to 2.88 and the average period per job increased to 5.222 years. Of the control group, five men returned to their pre-war employment; had the remaining 21 not had to seek new jobs after demobilisation, the average number of jobs per person would have been reduced to 3.42, and the average period per job increased to 4.708 years.

Occupational Record.

| | Test Group | | Control Group | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| Average no. of years worked | 15.04 | 14.30 | 16.10 | 9.67 |
| Average no. of jobs | 3.38 | 3.62 | 3.84 | 3.68 |
| Average period per job (years) | 4.45 | 3.95 | 4.19 | 2.47 |
| No. of subjects self-employed | 14 | 10 | 2 | 1 |
| On active service | 65.85% | 19.5% | 63.41% | 9.76% |

TABLE XIII.

From these comparisons between the homosexual and control groups, two points emerge, viz:

(1) Type of occupation.

(a) Homosexual persons of both sexes are to be found in all types

of work, but particularly in business, clerical and artistic fields;

(b) Heterosexual persons predominate in business, clerical and industrial (technical) jobs; and

(c) Females of both groups are about equally represented in humanitarian spheres.

(2) Occupational stability.

(a) Homosexuals are as steady and reliable in employment as heterosexuals. If this finding has not been substantiated by surveys on institutionalised homosexuals, it will probably be found that institutionalised heterosexuals are equally unstable as regards employment. The cause should be sought in the personalities of all those who go to prison and not in the homosexuality of a small minority of prisoners.

(b) Homosexuals of both sexes tend to show more initiative than heterosexuals in running their own business concerns rather than being wage- or salary-earners.

## IV. INTERESTS.

### 1. Hobbies and Leisure Activities.

Terman and Miles have stated[1] that interests show a relationship with male-female scores which agrees with occupational findings. This is not altogether borne out by the present study where the occupation of the majority of subjects (43%) is in the business or clerical field. Although successful in their employment, these people spend their leisure time and find their interests in other, particularly cultural, spheres and in active sport.

Typically adult masculine interests have been described by Terman and Miles as "active", and include science, mechanics, sports and travel, whereas they rate typically adult female interests as "sedentary" and include under this heading cultural pursuits - art, music and literature - and religion. For the purpose of classification in this study, outdoor activities such as driving, riding, climbing, fencing, gardening, etc., have been included in the "active" list, and indoor activities such as knitting, sewing, fancy needlework, tapestry, dressmaking, millinery, cooking, etc., in the "sedentary" list.

Comparing the control, or "normal" group with Terman and Miles' finding above, it is interesting to note that 80% of the men have active interests only, 14% are interested in the arts as well as active pursuits, and 6% have entirely sedentary interests. The three men comprising the last group are an engineer with five children, a wood machinist with three children and a headmaster with three children; the first two subjects' occupations, as opposed to their interests, would definitely be considered masculine or active. As far as one can judge from both occupation and interests, therefore, the males comprising the control group in this study are as typically masculine as one could expect to find in a random sample of the population; only one was employed in the artistic (or feminine) field as a hairdresser, but he did not care for this and shortly after having served his apprenticeship gave it up in favour of driving a lorry which is more in keeping with his active (or masculine) interests. Three have completely sedentary (feminine) interests, two of them with active (masculine) occupations.

The control group of women are, as expected, predominantly interested in sedentary occupations. Many of them, however, although not unduly interested in sport generally, which is said to be a masculine trait, do indulge in some form of active recreation, chiefly tennis, swimming and gardening. For this reason, these women have been classified as having "mixed"

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[1] Terman and Miles, Op. Cit., p. 208.

interests. The number of women with mixed and purely sedentary interests comprises 92% of the control group. The four with only active interests are a floor manageress and a bookkeeper with one child each, a floor supervisor with two children, and a sister tutor with three children, none of which may be considered typically masculine occupations.

Taking these findings regarding occupation and interests in conjunction with marriage, which was the original only criterion for "normality", it would appear to be safe to assume that the control group in this study is in fact a group with normal masculine and feminine interests living heterosexual lives.

The majority of the test group (68%) have mixed interests with the arts predominating, particularly music and the theatre. A great number of the subjects play some musical instrument and many are members of dramatic societies. Only five men and four women failed to express interest in any of the arts. Of these, three men and one woman, with a mean age of 31.25 years, prefer the passive or feminine rôle in their homosexual relationships. A further three men and three women who prefer the active or masculine homosexual rôle have purely sedentary interests, their mean age being 32.5 years. No less than 91% of the test group (45 men and 46 women) have sedentary interests, 68 of these subjects, of whom 38 are women, being interested in active pursuits as well. In view of these mixed interests, there is very little correlation between interest and preferred sexual rôle, although it is interesting to note that exactly half of the "feminine" males have typically feminine interests. This is in keeping with the findings of Terman and Miles[1] on passive male homosexuals. They suggest that such responses can hardly be explained as superficial affectations and are convinced that "on the whole they give an essentially correct picture of the actual type of personality most prevalent in this group." Campbell[2] explains this as follows: "Repression is not as frequently resorted to as it is by the normal. The invert faces the fact of his abnormality and does not attempt to push it out of his life. His love for art, literature and music may represent a form of sublimation for his failure to become a member of the general herd, but it is more likely a reflection of his effeminate, artistic disposition."

The interests of both groups are summed up in Table XIV overleaf, from which it will be seen that the normal men are primarily interested in active pursuits, and the normal women in sedentary pursuits with some active interest such as gardening or sport in addition. The homosexuals of both sexes are mainly interested in both artistic and active pursuits. Mental

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[1] Terman and Miles, Op. Cit., p. 283. [2] Campbell, Op. Cit., p. 174.

masculinity in the homosexual women is demonstrated by their profession of positive interests usually regarded as typically male, but is not reflected in any assertion of indifference to the acceptedly feminine arts and pursuits, thus bearing out only one of the two criteria for mental masculinity put forward by Terman and Miles[1].

Interests.

| Interests | Males | | | | | Females | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Test Group | | | | | Test Group | | | |
| | Control grp. | Active sexual rôle | No preferred rôle | Passive sexual rôle | Total | Control grp. | Active sexual rôle | No preferred rôle | Passive sexual rôle | Total |
| Active | 40 | 1 | 1 | 3 | 5 | 4 | 3 | 0 | 1 | 4 |
| Mixed | 7 | 20 | 3 | 7 | 30 | 21 | 24 | 5 | 9 | 38 |
| Sedentary | 3 | 3 | 2 | 10 | 15 | 25 | 3 | 1 | 4 | 8 |

TABLE XIV

As the numbers in the test groups were very small when subdivided into preferred sexual rôle, only the figures in the Total Test Group columns in Table XIV above were used in the following computations. The $Chi^2$ test for the significance of 2 X 3 tables was therefore applied to Table XV below.

Interests (Cont.)

| | Males | | Females | |
|---|---|---|---|---|
| | Control Group | Test Group | Control Group | Test Group |
| A. Active | 40 | 5 | 4 | 4 |
| B. Mixed | 7 | 30 | 21 | 38 |
| C. Sedentary | 3 | 15 | 25 | 8 |

TABLE XV.

The differences in interests between the test and control groups were found to be highly significant for both sexes, and the table was then broken down to try and ascertain more clearly where these differences lay.

Males. A comparison of interests A with B, and A with C, gave

[1] Terman and Miles, Op. Cit., p. 220

highly significant results. Because the proportions in B and C are so similar in the test and control groups, it seemed reasonable to pool B and C for comparison with A, which a fortiori gave highly significant results. ($Chi^2$ = 49.52).

Females. As the number of cases in the A interest group was not only very small but also the same for both the test and control groups, these w ere ignored, since their addition to either groups B or C would not affect any result. A comparison of B and C gave a highly significant result. ($Chi^2$ = 12.64).

There is a positive association between active interests and the control group of males, and between sedentary interests and the homosexual males. There is also a positive association between sedentary interests and the control group of females; but the relationship between active interests and the homosexual females, although positive in this sample, should be regarded with more caution.

## 2. Homosexual Relationships.

### Preferred Sexual Rôle.

The majority of homosexuals state a decided preference for taking either the male or female rôle in their relationships, although Terman and Miles[1] assert that only the passive male homosexuals and the active female homosexuals are true inverts in the broadest sense of the term. This does not appear to be altogether true of the present group where five out of fifteen males who have never had any heterosexual experience at all, and eight out of ten who have experimented on only one or two occasions, invariably assume the masculine rôle in homosexual relations; similarly, four out of fifteen women are always the passive partner and have had little or no heterosexual experience. These numbers do not include those whe merely prefer to take the rôles mentioned. Out of 25 men and 19 women, therefore, who have been completely or almost completely homosexual throughout their lives, 13 men are always masculine or active and four women are always feminine or passive in their homosexual rôles. It is felt that these 13 men and 4 women are as true inverts as the 12 passive males and 15 active females who invariably adopt the rôle of the opposite sex in their homosexual relationships.

Of the 50 men comprising the test group, 21 are always the active sex partner and a further three prefer to adopt the active rôle; 13 are

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[1] Terman and Miles, Op. Cit., p. 256.

always the passive partner and a further seven state a preference for this rôle; six men have no particular preference, but adopt either rôle depending on the mood and the partner.

It has been suggested that women are not nearly as emphatic in their preferences, but are much more inclined to find satisfaction in either rôle. Deutsch[1], for example, states, "A typical feature of overt female homosexuality is exchange of rôles between the partners, even when one of them is more active and sadistic and the other more passive and masochistic. Because of their great facility in identifying themselves with love objects of the same sex, women can play the two rôles. This fact is one of the most powerful motives for female homosexuality." She comments again on the prominence of this double rôle when discussing the analysis of 11 cases of female homosexuality[2], as also does Brody[3] in these words: "In the sexual act the homosexual woman plays a double rôle. She is the one who suckles and is at the same time suckled." In contrast to these statements, 22 women of the present group state that they are the active or aggressive partner, and seven always adopt the passive rôle; 15 are prepared to assume either rôle to please the partner, eight of these stating a preference, however, for the active part. Only six women expressed no preference at all. The active, aggressive or masculine sexual rôle, therefore, appears to be the predominant choice of both sexes in the present group, but it is contended that, since their heterosexual experiences are equally limited, and their choice of partners the same, the active males and the passive females are as homoerotically oriented as the rest of the group. The preferences of the subjects in this survey are shown in Table XVI.

Preferred Sexual Rôle.

| | Active rôle | Prefer active rôle | Total active | Passive rôle | Prefer passive rôle | Total passive | No preferred rôle |
|---|---|---|---|---|---|---|---|
| Males | 21 | 3 | 24 | 13 | 7 | 20 | 6 |
| Females | 22 | 8 | 30 | 7 | 7 | 14 | 6 |
| TOTAL | 43 | 11 | 54 | 20 | 14 | 34 | 12 |

TABLE XVI.

The figures given in Table XVI above, however, are not statistically

[1]Deutsch, 1946, Op. Cit., p. 266. [2]Deutsch, 1932, Op. Cit., p. 484.
[3]Brody, Op. Cit., p. 57.

significant, i.e. no conclusion can be drawn with respect to any relationship between sex of subject and sexual rôle taken by this group of homosexuals. ($Chi^2 = 1.76$).

Emotional Stability.

Differences in the basic psychology of males and females become more apparent among homosexuals than among heterosexuals, the chief difference being in the duration of relationships. According to Deutsch[1], one difference between masculine and feminine development "stems from the fact that during the years of greatest psychologic growth, that is in adolescence, women show a definitely stronger tendency than men to spiritualisation of the sexual instinct"; she adds that "feminine sexuality is sublimated into definite emotional values to a much greater extent than masculine sexuality", and that "the woman's choice of love objects is to a great extent determined by her past emotional ties and her psychologic readiness for motherhood." The greater inclination to promiscuity among men generally is commented on by Kinsey et al as follows[2]: "There seems to be no question but that the human male would be promiscuous in his choice of sexual partners throughout the whole of his life if there were no social restrictions. This is the history of his anthropoid ancestors, and this is the history of unrestrained human males everywhere. The human male almost invariably becomes promiscuous as soon as he becomes involved in sexual relations that are outside of the law. This is true to a degree in pre-marital and in extra-marital intercourse, and it is true of those who are most involved in homosexual activities. The human female is much less interested in a variety of partners. This is true in her pre-marital and extra-marital histories, and, again, it is strikingly true in her homosexual relations."

For these two reasons, lack of social restrictions and general promiscuity, the duration of homosexual relationships is considered to be shorter among males than among females. At the under-privileged level, Henry and Gross[3] state that the sexual attachments are of very brief duration, and that what is sometimes known as 'marriage' between homosexuals rarely if ever occurs, almost all the men in this group being quite promiscuous. Havelock Ellis[4] remarks, "So far as I know, it is extremely rare to observe a permanent liaison between two pronounced inverts", but regarding women he comments, "In her sexual habits we perhaps less often find the degree of promiscuity which

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[1]Deutsch, 1946, Op. Cit., pp. 113, 116, 151.

[2]Kinsey et al 1948, Op. Cit., p. 589.

[3]Henry and Gross, Op. Cit., p. 608. [4]Ellis, Op. Cit., pp. 285, 260.

is not uncommon among inverted men, and we may perhaps agree with Moll that homosexual women are more often apt to love faithfully and lastingly than homosexual men." Kinsey et al found a number of histories in which the female homosexual partners had lived together and maintained regular sex relations in some instances for as long as 10 or 15 years, or even longer, such long-time associations, they state, being rare among males.

A five-year study of 2,000 homosexual men and 100 homosexual women by Giese[1] bears out by observation the above contentions. He found the homosexual man to be usually "incapable of stable relations with a male partner." Female homosexual relationships, on the other hand, he found to be usually lasting and firm. He suggests that "the relationship of male partners demonstrates the inconstant character of male sexuality in contrast to the constant, dependable, and in the final analysis, firm character of feminine sexuality." Catherine Davis[2] agrees that "feminine inversion differs from masculine homosexuality in being more closely associated with sentiments and emotions that transcend a purely physical attraction."

Various theories have been expounded as to why homosexual alliances are usually of such short duration. Kimball Young, for example, says[3]: "There usually remains the spectre of unconsciously motivated sense of sin and guilt, as well as the whole restriction of the normal sharing with others of these deep emotional expressions. Such a pattern of life tends to be dissociative rather than integrative." Henry[4] points out that "the sex variant is more likely to continue with the romantic aspects of affectionate unions"; when the romance wears off, as it inevitably must in any human relationship, the desire to perpetuate it is satisfied by starting a new union. Bergler[5] blames the brevity of homosexual relationships on their quarrels, especially in jealousy, which "surpasses everything that occurs, even in the worst heterosexual relationship", and which he interprets as merely the "acting out of the mechanism of 'injustice collecting'." Kinsey et al, however, whilst recognising that long-time relationships between males are notably few, reason as follows[6]: "Long-time relationships in the heterosexual would probably be less frequent than they are, if there were no social custom

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[1] Hans Giese, Zur Psychopathologie der Homosexuellen Partnerwahl (Psychopathology of Homosexual Partner-choice), J. Psychol. Psychother., 1953, 1, 223 - 225. Psychol. Abstr. 7895, 27.11, Nov. 1953.

[2] Quoted by Ford and Beach, Op. Cit., p. 126.

[3] Kimball Young, Op. Cit., p. 585. [4] Henry, 1950, Op. Cit., p. 1027.

[5] Bergler, 1948, Psych. Quar., Op. Cit., p. 82.

[6] Kinsey et al, 1948, Op. Cit., p. 633.

or legal restraints to enforce continued relationships in marriage. But without such outside pressures to preserve homosexual relations, and with personal and social conflicts continually disturbing them, relationships between two males rarely survive the first disagreements." On the other hand, with reference to females, they argue[1] that "a steady association between two females is much more acceptable to our culture and it is, in consequence, a simpler matter for females to continue relationships for some period of years. The extended female associations are, however, also a product of differences in the basic psychology of females and males."

Although the numbers in the present survey are comparatively small, the same general trend of differences between the sexes is borne out. There were four men who had never had a permanent relationship with anyone, and a further six whose longest relationship with any one partner had been less than a year and ranged from "about a fortnight" to nine months; only three of the women had had alliances of less than a year, two of them having lasted about six months and one for about nine months. At the other end of the scale, there were three men whose longest previous relationships had been of eight years' duration and two of ten years, whilst current relationships in two cases had already lasted for eight years, one for ten years, two for 11 years, one for 12 years and two for 22 years. Including both previous and current relationships up to the time of testing, the mean duration for relationships between males was 4.8 years.

The women's relationships seemed slightly more stable. Of previous relationships, two had lasted for eight years, one for nine years, two for 14 years and one for 18 years (this being terminated by the departure of the partner from South Africa through force of circumstances). Current relationships had continued up to the time of testing as follows: One for 16 years, one for 20 years, two for 21 years and one for 30 years. The mean duration was 6.25 years.

From Table XVII overleaf it will be seen that eight men and five women appear to have contracted successful relationships which have already lasted for eight or more years, whilst ten men and three women appear to be promiscuous to the extent of having relationships which do not last for a year. The longest period of any relationship with one partner has lasted less than five years for more than half the subjects of both sexes (28 males and 29 females) but when the duration has been longer than this, the women seem to be slightly more stable.

These findings do not bear out the general contention that long-time

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[1] Kinsey et al 1953, Op. Cit., p. 456.

relationships between homosexuals of either sex are extremely rare, since 43% of the cases under discussion have found partners with whom they have formed an alliance of five or more years standing, whilst 16% have formed relationships of ten or more years' duration. On the whole, they do not appear to be as promiscuous as previous research has suggested.

Longest Relationship.

| No. of Years. | Male Subjects | | | Female Subjects | | |
|---|---|---|---|---|---|---|
| | Previous relationship | Current relationship | Total | Previous relationship | Current relationship | Total |
| No permanent relationship | 4 | 0 | 4 | 0 | 0 | 0 |
| Less than 1 year | 6 | 0 | 6 | 3 | 0 | 3 |
| 1 year | 5 | 1 | 6 | 2 | 0 | 2 |
| 2 - 2½ years | 2 | 2 | 4 | 6 | 3 | 9 |
| 3 - 3½ " | 1 | 2 | 3 | 5 | 2 | 7 |
| 4 - 4½ " | 2 | 3 | 5 | 3 | 5 | 8 |
| Less than 5 years | 20 | 8 | 28 | 19 | 10 | 29 |
| 5 - 5½ years | 5 | 1 | 6 | 4 | 1 | 5 |
| 6 years | 1 | 2 | 3 | 1 | 2 | 3 |
| 7 " | 0 | 0 | 0 | 1 | 1 | 2 |
| 8 " | 3 | 2 | 5 | 2 | 0 | 2 |
| 9 " | 0 | 0 | 0 | 1 | 0 | 1 |
| 10 " | 2 | 1 | 3 | 0 | 0 | 0 |
| 11 " | 0 | 2 | 2 | 0 | 0 | 0 |
| 12 " | 0 | 1 | 1 | 0 | 0 | 0 |
| 14 " | 0 | 0 | 0 | 2 | 0 | 2 |
| 16 " | 0 | 0 | 0 | 0 | 1 | 1 |
| 18 " | 0 | 0 | 0 | 1 | 0 | 1 |
| 20 " | 0 | 0 | 0 | 0 | 1 | 1 |
| 21 " | 0 | 0 | 0 | 0 | 2 | 2 |
| 22 " | 0 | 2 | 2 | 0 | 0 | 0 |
| 30 " | 0 | 0 | 0 | 0 | 1 | 1 |
| 5 years or more | 11 | 11 | 22 | 12 | 9 | 21 |
| Mean Duration | ... | ... | 4.8 yrs | ... | ... | 6.25 yrs |
| After 5 yrs., Mean Duration | ... | ... | 8.9 yrs | ... | ... | 11.2 yrs |

TABLE XVII.

Special Preferences.

No specific questions were asked regarding special preferences in sexual relationships, but six men and one woman volunteered information on

this subject.

One man, aged 43, whose first homosexual experience was at the age of 20, stated that he has never been in love and "prefers to avoid actual intercourse." Another, aged 33, prefers mutual masturbation. A 46-year-old subject confesses that he is strongly attracted to soldiers in uniform, particularly if they are wearing shorts; another, aged 26, likes tall fair men, and a fifth, aged 42, is only attracted to normal men whom he likes to seduce. None of these subjects has ever had any heterosexual experience. The sixth person, who is 44 years old, had one heterosexual experience when he was 16 and his first homosexual experience when he was 34; he is sexually aroused by the sight of blood from a small scratch on the partner's body and for this reason restrains himself as far as possible from sexual contacts. The only woman in this group prefers mutual fellatio. The women generally seem to be interested fairly within their own age groups and never with the very young.

V. PHYSICAL APPEARANCE.

There are homosexuals of both sexes who are strikingly obvious in appearance, the males of this type being called 'queens' and seeming to differ markedly from the main group of homosexuals who are more nearly like the average man[1]. These are the individuals who are usually regarded as "typical homosexuals" and it is probably to this small group that Bergler refers when he makes the following statement[2]: "Homosexuals pretend consciously that they simply imitate the husband-wife relationship. Therefore - in the passive variety - they imitate women, in such things as manner of dressing, movements, talking, walking, and use of perfume and cosmetics." Carpenter[3] describes Henry III of France and Queen Christina of Sweden as typical of the extreme group of homosexuals, but adds that these "extreme specimens ... are not particularly attractive, sometimes quite the reverse", and points out that "in reality ... these extreme developments are rare, and for the most part the temperament in question is embodied in men and women of quite normal and unsensational exterior."

A few general tendencies have been mentioned regarding the physical appearance of homosexuals. Havelock Ellis[4], for example, notes that "inverted women frequently tend to show minor anomalies of the piliferous system... If, as is not improbable, inversion is associated with some abnormal balance in the internal secretions, it is not difficult to understand this tendency." (It was noted in only one of the 50 female cases comprising the present group. Henry[5] comments that "the sex variant tends to have broad shoulders and narrow hips, an immature form of skeletal development." Landis et al[6] also found the hypoplastic body form to be associated with psychosexual immaturity, with tendencies toward the male body form more frequently apparent in homoerotic women. On the whole, however, they found the homoerotic type to be a heterogeneous group, some of the women being characterised by physical signs of maleness and some, showing no physical deviations, frequently reporting traumatic incidents of a sexual nature. Deutsch[7] agrees that two groups of homosexual women can be distinguished, the first including those who display pronounced masculine traits in the choice of object as well as in other manifestations of life, who are also more or less masculine in physical structure,

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[1]Karl M. Bowman, The Problem of the Sex Offender, Am. J. Psychiat., 108:4, Oct. 1951, pp. 250 - 257.

[2]Bergler, 1948, Psychiat. Quar., Op. Cit., p. 70.

[3]Carpenter, Op. Cit., pp. 30, 31.

[4]Ellis, Op. Cit., p. 253.

[5]Henry, 1950, Op. Cit., p. 1046.

[6]Landis et al, Op. Cit., p. 232.

[7]Deutsch, 1946, Op. Cit., p. 256.

and the second group including those who show no physical signs of abnormality, whose bodily constitution is completely feminine and whose inversion is 'obviously psychogenic in origin'. Bergler comments on the two types of homosexual females as follows[1]: "Lesbians consciously act the husband-wife relationship. The 'masculine' partner imitates the man in clothes, behaviour and attitudes. The onlooker is taken in by the camouflage and assumes that all Lesbians are masculine women. He cannot explain the feminine counterpart; this, however, is a puzzle which does not seem to bother him." He adds further[2], "Many Lesbians officially live the lives of married women... It is exactly this reservoir of married women which contributes most of the recruits to the great army of Lesbians." These women are presumably of normal feminine appearance.

Apart from these rather vague and very general comments on the physical appearance of homosexuals, and although "the general public, backed by the opinion of some clinicians, thinks that homosexuals can be picked out by their appearance and behaviour"[3], it seems to be generally agreed that the majority of homosexuals are indistinguishable from other people. This is quite emphatically stated by such authors as the following:

Krafft-Ebing (1899) : "Psycho-hermaphrodisic and many homosexual women do not betray their anomaly by external appearances nor by mental (masculine) sexual characteristics."[4]

Carpenter (1908) : "In bodily structure there is, as a rule, nothing to distinguish the subjects of our discussion" (homosexuals) "from ordinary men and women." "It has become pretty well established that the individuals affected with inversion in marked degree do not differ from the rest of mankind, or womankind, in any other physical or mental particular which can be distinctly indicated. No congenital association with any particular conformation or malformation has yet been discovered; nor with any distinct disease of body or mind."[5]

Deutsch (1932) : After "more or less profound analysis of 11 cases of female homosexuality" stated that none of these subjects "presented physical signs which might indicate that there had been a constitutional deviation, physiologically, in the direction of masculinity."[6]

Dickinson and Beam (1934) : "Appearance, dress and social status

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[1] Bergler, 1948, Marr. Hyg., Op. Cit., p. 197.
[2] Bergler, 1951, Op. Cit., p. 317.
[3] Laycock, Op. Cit., p. 246.
[4] Krafft-Ebing, Op. Cit., p. 391.
[5] Carpenter, Op. Cit., pp. 27, 57.
[6] Deutsch, 1932, Op. Cit., p. 484.

are without idiosyncrasy and above the average." "In the years of intensive anatomical observation, no notes of male appearance or structure appear, nothing points to organic differentiation."[1]

Henry and Gross (1938) : "The majority" (of homosexuals) "cannot easily be detected."[2]

Freud (1938) : "The inversion is found in people who otherwise show no marked deviation from the normal."[3]

Greenspan and Campbell (1945) : "By far the largest number of homosexuals cannot be distinguished from the normal heterosexual either in physique or in intelligence."[4]

Nothing has emerged from the present survey to contradict the above opinions. All types of body form were found in both sexes. Not more than two men were obviously effeminate; four were masculine in build but with rather feminine gestures, and three had slightly high-pitched voices; two could be described as "scruffy", but certainly not feminine, in appearance, but the remaining 78% were unremarkably masculine in appearance, manner and behaviour. Of the women, five were obviously masculine in appearance and dress, four were boyishly athletic in build and walk, and two had masculine gestures; 78% were not remarkably masculine in appearance, build or behaviour. On the whole the men were carefully and the women more casually dressed, but in outward appearance there was nothing to distinguish them from any other group of individuals.

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[1] Dickinson and Beam, Op. Cit., pp. 203, 207.

[2] Henry and Gross, Op. Cit., p. 608. [3] Freud, Ed. Brill, Op. Cit., p. 556.

[4] Greenspan and Campbell, Op. Cit., p. 682.

## VI. HEALTH.

### 1. Illnesses and Operations.

As far as general health is concerned, the group of homosexuals under review appears, on the surface, to be as fit and healthy as any cross-section of the population. 91% state that their present health is good or very good; two men and two women describe it as fair, and four men and one woman as poor. Of the last group, two of the men have had a coronary thrombosis, and one was awaiting a gastrectomy operation at the time of testing. Similarly, of the control group the figures were 93% good, two men and four women fair (one woman having phlebitis), and one woman poor, no reason being given.

Apart from the general state of health at the time of testing, however, the homosexuals as a whole seem to have been more prone to serious illnesses or operations prior to the time of testing. Eight men and nine women have never had any serious illness or operation in their lives; eight men and three women have had only one serious illness, such as meningitis, pneumonia, yellow jaundice, gonorrhœa, rheumatic fever, scarlet fever, enteric fever, bilharzia or malaria; and nine men and eleven women have had only one surgical operation, all of a minor nature and including tonsillectomy (seven cases), appendicectomy (two cases), hæmorrhoidectomy, the removal of cysts and the results of accidents in childhood, one was for the removal of surplus adipose tissue and one an operation for the straightening of his nose. Of the entire group, therefore, 48% have never had more than one illness in their lives. Organic afflictions were two cases of dysaudia, one having had an unsuccessful fenestration operation, and one case of uraniscolalia involving several operations in childhood.

A comparison of these figures may be made with Loeser's health record of sexual psychopaths in the military service which he regards as impressive, 68% having had no record of serious accident or illness[1], and with the figures taken at random from 50 male and 50 female files in the offices of the National Institute for Personnel Research. These comparisons are shown in Table XVIII overleaf.

It should be noted, however, that no deductions may be made from these figures, as the wording of the relevant question in the N.I.P.R. autobiographical questionnaire was, "Have you ever had any illness which necessitated your absence from school or work for more than one week?" It is

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[1] Loeser, Op. Cit., pp. 92 - 101

possible that some of these cases had, for example, a tonsillectomy operation or some other illness before school-going age, and these illnesses would not therefore be recorded. However, the number of pre-school illnesses of a serious nature is likely to be small, so the figures may give an indication of the greater number of illnesses undergone by the test group.

Health.

| Present General State of Health | Test Group | | | Control Group | | |
|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total |
| Very good or good. | 44 | 47 | 91 | 48 | 45 | 93 |
| Fair | 2 | 2 | 4 | 2 | 4 | 6 |
| Poor | 4 | 1 | 5 | 0 | 1 | 1 |
| Previous illness and/or Operation | | | | N.I.P.R. Sample | | |
| No serious illness/ operation | 8 | 9 | 17 | 22 | 27 | 49 |
| 1 serious illness | 8 | 3 | 11 | 9 | 8 | 17 |
| 1 operation | 9 | 11 | 20 | 7 | 6 | 13 |
| Only 1 illness prior to testing | 25 | 23 | 48 | 38 | 41 | 79 |

TABLE XVIII.

2. Psychosomatic or Psychoneurotic Indications.

Hysteria.

In all cases of true hysteria, according to Schilder[1], the psychogenic problem remains paramount. It is fundamentally a problem of social contact with other human beings under the aspect of suffering. He goes on to say, "Early disappointment in the relation to the parent plays a leading part in the structure of hysteria... In the early relations to parents, organic disease plays a very important part. It makes the individual still more dependent upon the parent. It also concentrates the love of the parent on the child. Organic ailment is, therefore, of fundamental importance for the whole psychology of hysteria. It reinforces the masochistic attitude in the person afflicted... It stresses the helplessness and dependence of

[1]Paul Schilder, The Concept of Hysteria, Am. J. Psychiat., 95:6, May 1939, 1389 - 1409.

the child on the love of the parents." Purtell et al[1] state that hysteria is a disorder seen only in women, and that it appears in men only when the patient has hopes of compensation. This compensation, of course, could be emotional.

Organic disease as well as prolonged or frequent illnesses in childhood were fairly common in the history of the homosexuals under review, thus suggesting early disappointment in the relations to the parents in a large number of cases. Examples of organic disease were heart trouble necessitating long absences from school, convulsions at the age of 13, "fits" following head injuries which kept the patient in bed "for weeks at a time", and scoliosis which prevented regular attendance at school; these accounted for seven cases, four others were delicate, sickly or highly-strung throughout childhood, and seven cases had frequent illnesses, a typical subject having had double pneumonia at the age of two, enteric fever at eight, diphtheria at nine and rheumatic fever at ten years of age.

The impression is that these children tried to gain or retain love or attention through the medium of ill health. Feelings of insecurity might have prompted this in nine cases where the home was disrupted by death, desertion or absence of one parent, and in one other case where the subject was a menopausal child born 15 years after the previous sibling and therefore possibly not a welcome addition to the family; this subject expressed no preference for either parent, although he "fought" with his father. The most outstanding common feature of the remaining eight cases is a decided cross-parent preference, two of the males expressing in addition definite antagonism to the father. Thus disrupted homes (four males and five females) and cross-parent preference (four males and four females) occur in 94% of the 18 cases comprising this group.

Asthma.

The discovery of the significance of allergic factors in the disease of asthma has tended to divert interest away from earlier observations that asthma is frequently associated with some sort of emotional instability and that asthma attacks are often precipitated by acute emotional conflicts. French[2] affirms that the asthma attack is usually precipitated by a temptation which threatens to estrange the patient from a mother figure, and that

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[1] Purtell et al, Observations on Clinical Aspects of Hysteria, J. Am. Med. Assoc., 146:10, July 1951, 902 - 909.

[2] Thomas M. French, Psychogenic Factors in Asthma, Am. J. Psychiat., 96:1, July 1939, 87 - 101.

the personality of these patients is built up in a large part around the task of mastering by one means or another the patient's fear of being separated from the mother. He adds, "A pre-genital attachment, clinging dependence to the mother, forms the basis of the ego's defences, whereas the phallic urges are the disturbing situation." Prout[1] interprets this to mean that it is sexual temptation rather than forbidden gratification that usually serves as the precipitating cause of asthmatic attacks.

McDermott and Cobb studied 50 cases of bronchial asthma from an allergy clinic and found[2] that 37 cases seemed to have an emotional component in their asthmatic attacks, the 13 "non-emotional" subjects being predominantly young males who might be chary of admitting emotions. In 20 cases the first attack had been emotionally precipitated, and in 31 cases later attacks were often emotionally precipitated. Out of their 50 cases, 30 showed neurotic traits (other than asthmatic) usually of a compulsive character. Fenichel is quoted by Prout[3] as stating in 1934, "The behaviour of the asthmatic is that of a compulsion neurotic with marked narcissism."

Asthma and hay fever were studied by Dunbar who did not relate the various characteristics exclusively to the syndromes of asthma and hay fever, but merely noted that they have been found in these patients (and in others) in quantitative prominence and in specific relationship to attacks. He states that these patients belong to the obsessive-compulsive character group, to whom time has a peculiar significance[4]. Amongst other characteristics, he notes the following: frequent headaches; alcohol was important; arthritic, neuritic or rheumatic symptoms; men had strong feminine identifications and women alienation from the female rôle; compulsive characters with but few protective rituals or phobias. He adds, "It has been said that patients with asthma and hay fever are ambitious, hyperactive, self-absorbed and mentally sensitive."

In a study of asthmatic children, Weiss and English found that there was a large percentage who were both over-anxious and insecure[5].

An interesting study was carried out by Gace and Graham on 128 children with various diseases or symptoms as responses to life situations.

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[1]Curtis T. Prout, Psychiatric Aspects of Asthma, Psychiat. Quar., 25:2, 1951, 237 - 250.

[2]Neil T. McDermott and Stanley Cobb, A Psychiatric Survey of 50 Cases of Bronchial Asthma, Psychosom. Med., 1:2, Apr. 1939, 203 - 244.

[3]Prout, Ibid, quoting O. Fenichel, Outline of Clinical Psychoanalysis, New York, Norton, 1934, 217 - 226.

[4]H. Flanders Dunbar, Psychoanalytic Notes Relating to Syndromes of Asthma and Hay Feverl, Psychoanalyt. Quar., 7, Jan. 1938, 25 - 68.

[5]Quoted by Prout, Ibid, p. 241.

They found[1] that "each of these conditions was associated with a particular, completely conscious, attitude toward the precipitating situation", i.e. there were physiological changes specific to each attitude, these changes being biologically appropriate to the attitudes they accompany. For example, vasomotor rhinitis ("runny nose") indicated facing a situation with the wish that the patient did not have to do anything about it, or that it would go away, or that someone else would take over responsibility - to deal with it by excluding it. The attitude in asthma, they state, is the same, but the feelings are more intense.

The biographical information of 12 subjects of the present survey who suffer from asthma and/or hay fever was studied in relation to the above-mentioned findings. Only three of these subjects were females.

In six cases the home was broken by death or alcoholism, in one case there was friction between the parents, and three cases expressed either indifference to or dislike of both parents. In the remaining two cases where the home life was apparently normal, one man is obsessed by fear of "evil thoughts", and the other had a frail, delicate-looking mother who was "adored by the entire family" and who probably exerted a great subtle dominance over all the members thereof. Five of the men preferred their mother, two of these expressing antagonism to the father; one man feared his dominant mother and stated that he was in love with his father and always had been. Insecurity in childhood is therefore the predominating common feature in these asthmatic cases, dependence on the mother not being very apparent unless it was supplementary to the insecurity. Other symptoms shown by four of these subjects are constipation, nail-biting and fear of germs, all of which have a compulsive neurotic basis. Headaches are experienced by three cases, rheumatism and fibrositis by two, and five of the males are heavy drinkers, although not inebriates. Female identification amongst the males does not emerge clearly; only one male invariably takes the female rôle in his homosexual relationships and three express a preference for the female rôle; four are always the active (male) partner and one has no preference. Of the females, two are the active or masculine partner and the other has no preference.

Most of the characteristics ascribed to asthmatic patients therefore appear in one or more of the homosexual asthmatic subjects, but the most striking common feature is a home that was broken, unhappy or lacking in affection in 83.3% of the cases.

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[1] Gace and Graham, Relationship of Specific Attitudes and Emotions to Certain Bodily Diseases, Psychosom. Med., 14:4, 1952, 243 - 251.

Duodenal Ulcer.

The typical patient suffering from a duodenal ulcer, according to Gace and Graham[1], is one who is seeking revenge and wishing to injure the person who has injured him. Of the six male and two female cases here reviewed who either have or have had a duodenal ulcer, only three males came from broken homes, which might indicate an obvious motive for an unconscious desire for revenge. It is interesting to note that the remaining three males, whose homes were not disrupted, have all been cured. Two of these had no parental preference whilst the third was "spoiled" by his mother. Of the two women, whose homes were not disrupted, one was cured by gastrectomy and the other is receiving treatment.

Other Stomach Upsets.

Three males and two females suffer from nervous dyspepsia, whilst liver attacks, chronic gastritis, bilious and vomiting attacks are suffered by five other females. The only subject in this group, a male, who did not come from a home disrupted in childhood had an overbearing, dominant, possessive mother.

Migraine.

The Rorschach test was administered by Ross and McNaughton[2] to 34 female and 16 male subjects who suffered from migraine and they found that items associated with migraine may be "a contributing cause, a common secondary result, or a manifestation of factors more basic which produce both migraine headaches and a typical personality." They are : persistence towards success, difficulty in sexual adjustment, perfectionism, conventionality, intolerance, and in general obsessive-compulsive features; harbouring of strong resentments was not confirmed. The group was not essentially more neurotic than an unselected group although having some features in common with psychoneurotics and others with brain disease. Similarly Gace and Graham[3] found that migraine patients had been making an intense effort to carry out a definite planned programme, or to achieve some definite objective.

Followed to a conclusion, therefore, migraine subjects should show some obsessive-compulsive features in common with asthmatics, but should not

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[1] Gace and Graham, Op. Cit.

[2] W. Donald Ross and Francis L. McNaughton, Objective Personality Studies in Migraine, by Means of the Rorschach Method, Psychosom. Med., 7:2, Mar. 1945, 73 - 79.

[3] Gace and Graham, Ibid.

suffer from duodenal ulcers since the latter are supposed to harbour feelings of revenge. In fact, of the three males and eight females in the present test group who suffer from migraine, two females are also asthmatic, whilst one male had also had a duodenal ulcer which, at the time of testing, had been cured.

In addition to those cases who suffered from migraine, there were four males and six females who were subject to headaches.

Other Psychosomatic Symptoms.

Other physical ailments from which the subjects in this survey suffer, which may or may not be of psychosomatic significance, are: colds, sinusitis, catarrh, bronchitis; fibrositis, backache; hypertension blood pressure; psoriasis; and constipation. There were 18 males and 18 females who were not subject to any ailment; of these, eight males and three females were from normal (unbroken) homes, eight males and twleve females from disrupted homes, and two males and three females from unhappy homes. The ailments to which some of the homosexuals in this survey are prone are shown in Table XIX, together with similar complaints suffered by a random cross-section of subjects whose files are held by the N.I.P.R.

Psychosomatic Indications.

| | Test Group | | | Random NIPR Population | | |
|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total |
| Organic disease/prolonged or frequent illnesses | 9 | 9 | 18 | Question not asked. | | |
| Asthma/Hay fever | 9 | 3 | 12 | 6 | 4 | 10 |
| Duodenal ulcer | 6 | 2 | 8 | 1 | 0 | 1 |
| Other stomach upsets | 3 | 7 | 10 | 3 | 6 | 9 |
| Migraine | 3 | 8 | 11 | 1 | 4 | 5 |
| Headaches | 4 | 6 | 10 | 7 | 11 | 18 |
| Colds, sinusitis, catarrh, bronchitis) | 5 | 9 | 14 | 3 | 4 | 7 |
| Constipation | 3 | 4 | 7 | 3 | 0 | 3 |
| Fibrositis, arthritis, backache, rheumatic pains) | 0 | 6 | 6 | 1 | 4 | 5 |
| Hypertension blood pressure | 0 | 1 | 1 | 0 | 0 | 0 |
| Psoriasis | 0 | 1 | 1 | 0 | 0 | 0 |
| Not subject to any ailment | 18 | 18 | 36 | 29 | 23 | 52 |

TABLE XIX.

Of the test group subjects under the first five headings above,

some of the outstanding environmental features are as follows:

(1) Organic disease: disrupted home, 9 cases; not disrupted, but cross-parent preference, 8 cases.

(2) Asthma/Hay fever: early home life broken, unhappy or lacking in affection, 10 cases. Five males are heavy drinkers (not inebriates) as well.

(3) Ulcer: unbroken homes, 5 cases of which 4 are cured.

(4) Stomach upsets: disrupted homes, 9 cases.

(5) Migraine: 7 female cases from broken or unhappy homes; 1 female and 3 males from unbroken homes.

(6) Not subject to any ailment: 8 males and 3 females from normal homes; 10 males and 15 females from disrupted/unhappy homes.

It would appear that ulcers, asthma and hay fever are more prevalent amongst males, whilst migraine and stomach upsets are more common amongst females, whether homosexual or not. It would also appear that homosexuals of both sexes are subject to more ailments generally considered to be psychosomatic in origin than are cases from a random section of the population as a whole. However, this evidence should not be taken as conclusive since the N.I.P.R. subjects were mainly tested with a view to employment and might not have been completely frank; the homosexuals, on the other hand, had nothing to lose by honesty in this connection.

Psychoneurotic Symptoms.

Alcoholism. Whether alcoholism and homosexuality are related appears to be a debatable point, and if there is any relationship it is difficult to postulate which is cause and which is effect, or whether both are merely symptoms of some other maladjustment. Abraham[1] contends that women who display a strong inclination toward alcohol would probably, on closer observation, always reveal a strong homosexual tendency. This does not necessarily imply that all homosexual women have a strong inclination toward alcohol. Of the 50 women in this survey, 4 are teetotallers, 24 indulge only occasionally in alcohol, 15 are moderate drinkers and 7 described themselves as heavy drinkers, one admitting that she is an alcoholic. The term "heavy drinker" does not imply that a subject is an inebriate or drinks frequently to excess; it simply means that the person has regular drinking habits which may be less moderate than those found in the usual social circles.

Kahn[2] found that most of his homosexual prisoners, both male and

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[1] Karl Abraham, Relations between Sexuality and Alcoholism, Internat. J. Psychoanal., 7:1, Jan. 1926, 2 - 10.

[2] Kahn, Op. Cit., p. 54.

female, gave a history of having drunk alcohol to excess in one form or another, and Campbell[1] agrees that the homosexual frequently drinks moderately, and occasionally to excess, "particularly when frustrated in his biologic adjustment." Allen makes the following rather more cautious statement[2]: "One finds in certain homosexuals a strong tendency towards alcoholism. Moreover, since narcotics of any sort produce regression, this accentuates the condition... The homosexual is usually an unhappy person since he is trying to live in a world adapted to normal heterosexual persons," therefore alcohol may be a drug to dampen his misery and temporarily shut out unpleasant reality, or may release inhibitions (although it is physiologically a sexual depressant) and help the shy homosexual to make contacts, or may be symptomatic of hidden oral cravings.

Ford and Beach point out that alcohol is one of the most commonly used drugs in any societies[3]. Its use is not restricted to homosexuals; but in order to investigate the hypothesis that regards alcoholism as a condition involving some homosexual component, Botwinick and Machover administered the MMPI M-F Scale, Terman and Miles' M-F Scale and Terman and Miles "I" (Invert) Scale to 39 hospitalised male alcoholic patients aged from 30 to 49 years. The only significant differences between the means of these patients and of the populations employed in the standardisation of the tests appeared in the "I" Scale for measuring the interest pattern of sexual inverts. These differences would therefore point to the "normality" of the experimental alcoholic population, since the standardisation group for the "I" Scale was composed of homosexual individuals. They concluded that according to results shown by the tests used, "homosexuality, latent or otherwise, cannot be an essential factor in alcoholism, although it may play a dynamic rôle in individual cases."[4]

In the male group under review in the present survey, one is a teetotally, 16 drink occasionally, 23 moderately and ten are heavy drinkers. There does not therefore appear from this survey to be any very close relationship between alcoholism and homosexuality, since only 17% consider themselves to be heavy drinkers, including the one who stated that she is an alcoholic.

Drug Addiction. Kahn[5] found that the majority if not all of the

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[1]Campbell, Op. Cit., p. 245. [2]Allen, 1949, Op. Cit., p. 141.

[3]Ford and Beach, Op. Cit., p. 237.

[4]Jack Botwinick and Solomon Machover, A Psychometric Examination of Latent Homosexuality in Alcoholism, Quar. J. Stud. on Alc., 12:2, June 1951, 268 - 272.

[5]Kahn, Op. Cit., pp. 130, 54.

male and female homosexual prison inmates studied by him either were or had been drug addicts during some period of their lives, and that "practically all" of them admitted having been drunk and to have drunk excessively in their lives before being addicted to the drug. With two exceptions, they were all addicted to nicotine, in the form of cigarettes only. He emphasises that most of the homosexuals are not convicted for homosexuality (none of the females). His findings amongst this prison population of homosexuals suggest to him "that alcoholism, drug addiction and homosexuality are all elements of sexual escapes, or components." Glover[1] states that the close association of homosexual interests and drug addiction "implies either the persistence of a defence system, or the ruins of a defence system."

Because alcoholism and drug addiction were prevalent amongst Kahn's prison inmates, it should not be assumed that they are equally prevalent amongst all homosexuals, particularly since he points out that although most homosexuals were drug addicts, most of the drug addicts were not homosexuals[2].

It is unfortunate that the present test group was not asked any questions on drug addiction, but two subjects stated that they took dexadrine or benzadrine, one received psychiatric treatment and one other has been successfully treated for drug addiction at an Institution.

Other Psychoneurotic Symptoms. Among the psychoneurotic symptoms which were apparent during the testing of the subjects under discussion were the following:-

Primary dysphemia, 1 female. (Another female said that she stuttered between the ages of approximately 15 and 17 years.)
Secondary dysphemia, 1 male and 1 female.
Rhinolalia clausa, 1 female.
Occasional sigmatism, 1 male.
Occasional dyslalia, 1 female. (Lapses into the speech of a three-year old.)
Facial and shoulder tics, 1 male.
Nailbiting, 1 male.

Other subjects admitted the following symptoms:-

"Nerves", 3 males. (Plus 1 male from the N.I.P.R. sample.)
Insomnia, 2 males, 2 females. (N.I.P.R. sample, 6 males and 4 females.)
Somnambulism in childhood, 1 male.
Monthly sore mammary glands, 1 male.
Periods of depression, 2 males, 1 female. (Also admitted by 2 male subjects from the N.I.P.R. sample.)
Two females had had nervous breakdowns and one male had attempted suicide "several times."

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[1] Edward Glover, On the Ætiology of Drug Addiction, Internat. J. Psychoanal., 13:3, Jul. 1932, 298 - 327.

[2] Kahn, Op. Cit., p. 52.

In comparison with these numbers are the figures of Ellis[1] who found 28 out 80 subjects (35%) to have more or less frequency or morbidity other than homosexuality - eccentricity, alcoholism, neurasthenia, insanity or nervous disease - and who quotes Hirschfeld's finding that 62% of 500 inverts "showed nervous symptoms of one kind or another, including sleeplessness, sleepiness, tremors, stammering, etc." Similarly, 66% of the present group show symptoms of some kind which might be interpreted as neurotic.

3. Psychological Treatment.

The prognosis by psychological treatment in cases of homosexuality is not generally considered to be good. Freud himself says[2], "The removal of genital inversion, or homosexuality, is in my experience never an easy matter. I have rather found that success is possible only under specially favourable circumstances, and even then that it essentially consists in being able to open to the restricted homosexuals the way to the opposite sex, till then barred, thus restoring their full bisexual functions. After that it lay with themselves to choose whether they wished to abandon the other, banned by society, and in individual cases they have done so." Norwood East[3] is of the opinion that "when homosexuality is environmentally determined it is much more likely to be amenable to psychotherapy than when it is due to endocrine effects;" this opinion is shared by Glover[4] in these words: "Particularly in homosexual perversions it is necessary to establish the respective significance of constitutional and of developmental factors. The stronger the constitutional factor the less likely is resolution possible by psychotherapeutic means. In any case it is unreasonable to expect that even in favourable cases, the cure will necessarily be immediate or permanent."

The alternative to cure appears to be acceptance. Laycock[5] points out that many homosexuals cannot, with present knowledge, be helped to achieve heterosexual development, but must be guided to accept themselves without an acute sense of guilt or inferiority - an objective often difficult to attain "in a society which looks on them with scorn or horror," and in which they are handicapped persons who, like all handicapped persons, "need help in accepting their handicap objectively, and then going on to realise their potentialities."

The vast majority of homosexuals never present themselves for

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[1]Havelock Ellis, Op. Cit., p. 265. [2]Freud, 1920, Op. Cit., p. 129.
[3]Norwood East, 1939, Op. Cit., p. 665. [4]Glover, 1945, Op. Cit., p. 141.
[5]Laycock, Op. Cit., pp. 248, 249.

psychiatric treatment of their homosexuality since they do not appear to be unduly disturbed by it. If, as Freud says, neurosis is a negative of perversion, this is understandable. Allen[1] also comments, "If one has a perversion with no discomfort there is less compulsion to get well since one can obtain sexual pleasure with little inconvenience."

As far as women are concerned, Allen is of the opinion that cure is more easily effected than in men[2], whilst Deutsch states that certain types of female homosexuality seem to be more accessible to analytic investigation, being more often connected with neurotic disturbances, "whereas the masculine forms less frequently supply opportunity for psychiatric treatment, since most of these women accept the fact of their inversion and do not desire to be cured." Anna Freud[4] feels that good prognosis depends on relatively healthy development up to the phallic phase, where abnormality begins with failure to identify with the father and the patient progresses to homosexual object choice.

In some cases treatment may be given for mental or nervous illness which may or may not be related to the patient's homosexuality, either as cause of effect. In the group under review, two men sought psychiatric treatment directly because of their homosexuality; one was advised to seek heterosexual experience which proved to be unsatisfactory, and the other was psychoanalysed, which removed various psychosomatic symptoms including migraine and chest troubles; but both remained completely homosexual and adjusted to their way of living. One man and one woman have received psychiatric treatment for psychoneurosis and nervous breakdown respectively, and one man and one woman have been suffessfully treated for drug addiction, the man having previously attempted suicide as well; these four subjects also remain completely homosexual in their relationships.

4. Summary.

The general health of the group of homosexuals when interviewed was good in 91% of cases.

The pre-test records of the homosexual group showed a greater number of serious illnesses and surgical operations than the records of 100 subjects taken at random from the N.I.P.R. files. Of these two groups, those having had not more than one illness were 48% and 79% respectively. These

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[1]Allen, 1949, Op. Cit., p. 314. [2]Allen, Ibid, p. 317.
[3]Deutsch, 1946, Op. Cit., p. 268.
[4]Anna Freud, Op. Cit., p. 338.

figures, however, are not conclusive although they may be indicative of escape or dependence through illness.

The high number of combined psychosomatic and psychoneurotic symptoms indicates that these homosexuals as a group are perhaps more neurotic than the normal population. Individually, some homosexuals are asthmatic, some are heavy drinkers, some have been drug addicts, some are migraine or duodenal ulcer subjects, and so on; but so are some heterosexuals. It must also not be overlooked that 23% of the cases reviewed (11 men and 12 women) show no neurotic symptoms at all, whereas others are highly neurotic and may have been included under several different headings. The same comments could apply to any group of individuals and do not necessarily have a bearing on homosexuality, although homosexuality might in itself be considered another neurotic symptom. Apart from homosexuality per se however, it cannot be said that all homosexuals are neurotic although as a group they might be considered more so than other groups. Once again there are exceptions who upset any generalisations on neuroticism amongst homosexuals.

## PART III : APPLICATION OF THE WECHSLER-BELLEVUE TEST.

### I. THE WECHSLER-BELLEVUE TEST.

Wechsler defines intelligence as follows[1]: "Intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment." He uses the words "aggregate" and "global" because (a) intelligence is composed of elements or abilities which, though not entirely independent, are qualitatively differentiable; and (b) because it characterises the individual's behaviour as a whole. He maintains[2] that even the best intelligence tests (as constituted at the time of publication of his article) measure effectively not all but only a portion of the capacities entering into intelligent behaviour, those which are best measured being determined by the intellective factors of intelligence such as the general one 'G' or more specific ones such as verbal ability, abstract reasoning, arithmetical and other abilities; these intellective factors do not, in his opinion, constitute everything which enters into intelligent behaviour. He refers to certain aspects of behaviour such as drive, persistence and interest which loom large in certain kinds of achievement and yet which do not pertain to abilities as ordinarily understood, but are historically looked upon as traits of temperament. These factors he would name the non-intellective factors in general intelligence, which include all affective and conative abilities which in any way enter into global behaviour. Therefore he is of the opinion that intelligence tests should measure the non-intellective as well as the intellectual factors in order more nearly to measure what in actual life corresponds to intelligent behaviour.

The revised South African version of the Wechsler-Bellevue Adult Intelligence Test, at present being standardised for use in this country, was the test applied in the present survey. The test comprises 11 subtests, very broadly divided into a verbal and a performance section, the former comprising six and the latter five subtests. These 11 subtests could, however, be said to fall into four main divisions, viz:

(1) essentially verbal : Vocabulary, Information, Comprehension and

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[1] David Wechsler, Measurement of Adult Intelligence, 3rd Ed., Williams and Wilkins Co., Baltimore, 1944.

[2] David Wechsler, Non-Intellective Factors in General Intelligence, J. Abn. Soc. Psychol., 38:1, Jan. 1943, pp. 101 - 103.

Similarities;

(2) the related functions of attention and concentration : Digit Span and Arithmetical Ability;

(3) visual organisation : Picture Completion and Picture Arrangement; and

(4) primarily visual-motor co-ordination : Block Design, Object Assembly and Digit Symbol.

The two tests in Group (2) above are included in the verbal section of the test, but are excluded whenever reference is made to the modified verbal test.

The psychological rationale to these four major groupings, as well as to the separate subtests, has been discussed, not only by Wechsler himself[1], but also by Reichard and Schafer[2], Rapaport[3], Freeman[4], Watson[5], Cohen[6], Patterson[7] and others.

1. Rationale.

General Information.

An analysis by Wechsler[8] of the individual tests of the Army Alpha examination revealed that the information test, "to the surprise of many", correlated much better with the total score than did arithmetical reasoning, disarranged sentences or analogies, all of which had generally been considered much better tests of intelligence. It gave a better distribution curve, a relatively small percentage of zero scores, and showed little tendency towards piling up maximal scores at the upper end. As long as care is taken in the selection of questions, and these are restricted to items which call

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[1]Wechsler, 1944, Op. Cit.

[2]Suzanne Reichard and Roy Schafer, The Clinical Significance of the Scatter on the Bellevue Scale, Bull. Menninger Clin., 7:3, May 1943, 93 - 98.

[3]Rapaport, David, Diagnostic Psychological Testing, Vol. I, The Year Book Publishers Inc., Chicago, 1945.

[4]Frank S. Freeman, Theory and Practice of Psychological Testing, Henry Holt and Co., New York, 1950.

[5]Robert I Watson, The Clinical Method in Psychology, Harper and Bros., New York, 1951.

[6]Jacob Cohen, A Factor-Analytically Based Rationale for the Wechsler-Bellevue, J. Consult. Psychol., 16:4, Aug. 1952, 272 - 277.

[7]C. H. Patterson, The Wechsler-Bellevue Scales : a Guide for Counselors, Charles C. Thomas, Springfield, Illinois, 1953.

[8]Wechsler, Ibid.

for the sort of knowledge that an average individual with average opportunities may be able to acquire for himself, avoiding too specialised or academic knowledge, then the range of a person's knowledge is generally a very good indication of his intellectual capacity. The total score and the individual items passed show the subject's interests and endowment as well as his educational and cultural opportunities, and the latter should be taken into account when analysing the scatter of subtest scores.

Freeman states the assumptions to be not only that the range of an individual's information is an indication of his intellectual capacity, but also that the more intelligent have broader interests, more curiosity and seek more mental stimulation. Watson adds that it also measures remote memory recall, whilst Cohen found from his factor analysis that it consistently loads the verbal factor and measures 'g' consistently well. Patterson suggests that this test represents as well the degree to which the individual has profited from his exposure to the experience and education to which almost everyone is subjected, and gives an indication of alertness in those who have had the opportunity to acquire the general knowledge required.

In testing 201 boys and girls from 12 to 15½ years old, from four different schools, on both general knowledge and the Otis Group Intelligence Scale, Inman[1] found a substantial correlation between tests of intelligence and of general knowledge. She also found that temperamental factors were involved where the discrepancy was great, and that broken homes, restriction due to poverty, etc., influenced the results to the extent that the ill-adjusted child was likely to be slow in acquiring general knowledge. If this tendency remains after adolescence, then the homosexuals as a group, 60% of whom are from broken or unhappy homes, should tend to have a relatively low mean score for the Information subtest; alternatively those from broken homes might be expected to score less on Information than those from homes that were not disrupted. This will be investigated in the section on results.

A further finding by Inman was that "throughout the age range studied boys were found to be much superior in general knowledge to girls of the same age." Since she found general knowledge and intelligence to be highly correlated, the inference here is that boys are more intelligent than girls, but she accounts for this phenomenon "in part by a difference in out-of-school environment and in part by a stronger vocational motive among boys to acquire and retain information on a wide variety of subjects."

It is of interest here to note that these same sex differences are

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[1] Dorothea M. Inman, Op. Cit., p. 86.

retained in both the present test and control groups, the males scoring significantly higher, at the .05 level, than the females on the general knowledge subtest. In the over-all mean IQs, however, there is no significant difference between the sexes in either the test or the control group. This finding suggests two possibilities: (a) that men retain an interest in a wide variety of spheres, whereas women are more restricted by their possibly more limited domestic environment; or (b) that the information subtest as it stands is biassed in favour of masculine interests. The questions in the General Information subtest as used in this survey are given in Appendix B. The grading of these questions in order of difficulty was based on the responses of approximately 500 subjects, without particular reference to sex differentiation, in a preliminary survey of the South African version of the Wechsler-Bellevue Scale.

According to Terman and Miles[1], typically adult masculine or "active" interests include science, mechanics, sports and travel, whereas typically adult feminine or "sedentary" interests include cultural pursuits - art, music, literature - and religion. Of the first 13 questions comprising the easier half of the test, although it might be expected that both men and women should find the answers equally easy, there are six questions which fall under the heading of specifically masculine interests quoted by Terman and Miles (science and geography or travel), whereas only two fall under their heading of specifically feminine interests (literature and religion). The questions comprising the second and more difficult half of this subtest are about equally divided, but the last and most difficult five questions offer a greater challenge to feminine interests, the ratio being two to one (religion and music to science).

It would appear, therefore, that in its present form there might conceivably be some bias towards the possibility of males scoring higher than females on this particular subtest, although the final IQ obtained is not significantly affected. Any such anomalies will be investigated during the course of the standardisation of the test and on a sufficiently large population sample to warrant any changes, either in order of difficulty or in the choice of questions themselves.

Comprehension.

One of the most gratifying things about the General Comprehension test when given orally is, according to Wechsler, the rich clinical data which it furnishes about the subject. Apart from this, he admits that it is

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[1] See p. 110.

difficult to say precisely what functions this test involves, and suggests that off-hand it might be termed a test of common sense, since success seemingly depends on the possession of a certain amount of practical information and a general ability to evaluate and utilise past experience. The questions included in this test are of a sort that the average adult may have had occasion to answer for himself at some time, or may have heard discussed in one form or another by friends; in any case, it should not be too difficult for the average subject to work out for himself some common sense answer to the questions, particularly since he is allowed as much time as he needs to think them over.

In the Comprehension test, soundness of judgment, i.e. the ability to make use of intellectual assets in a logically correct and emotionally relevant manner, is stressed by Reichard and Schafer and by Rapaport. The psychological term 'impaired judgment' may be illustrated by the quality of verbalisation in replies on this test by psychotic and neurotic subjects, since it involves the selection of appropriate answers from a wide array of potential responses not presented in multiple-choice form but having to be thought out by the subject himself.

In addition to measuring verbal ability, Cohen found the Comprehension test to be a good 'g' index for psychoneurotics.

Similarities.

This is the kind of test which Wechsler claims to have been recognised by all investigators as containing a great amount of 'g'. Apart from this, there are qualitative features which throw light on the logical character of the subject's thinking processes, on the maturity and level of his thinking, and on his ability to discriminate between essential and superficial likenesses. The method of scoring this test allows for these qualitative differences to be shown and therefore suggests both the evenness and the level of the subject's intellectual functioning, which may be primarily on a conceptual (2-point), functional (1-point) or concrete (nil-point) level. Poor performance, Watson suggests, seems to be related to loss in conceptual thinking or to rigidity or distortion in the thought processes. For example, persistently giving differences, when not of a very low intelligence, often indicates psychosis.

Both verbal and G factors are confirmed by Cohen.

Vocabulary.

Wechsler says of the Vocabulary test as follows: "Contrary to lay

opinion, the size of a man's vocabulary is not only an index of his schooling, but also an excellent measure of his general intelligence. Its excellence as a test of intelligence is seemingly derived from the fact that the number of words a man knows is at once a measure of his learning ability, his fund of verbal information and of the general range of his ideas."[1] He points out, however, that the number of words a man acquires must necessarily be influenced by his educational and cultural opportunities. Patterson, who considers this subtest to be the best single measure of intelligence, does not, however, consider that it is limited by formal schooling but rather by interest, range of ideas and learning ability.

Apart from its value as a measure of intelligence, however, the qualitative aspect of the responses is important since it reveals much about the quality and character of the subject's thought processes and often tells something of his cultural milieu.

Reichard and Schafer indicate that the Vocabulary test estimates the subject's original endowment and therefore, by a comparison of subtest results, impairment in other functions. Watson agrees that this test is relatively impervious to the influences of disease processes, and states that it is simultaneously a measure of the patient's fund of information, range of ideas, and learning ability, and that it reflects previously learned material. Patterson agrees that it is relatively impervious to impairment and deterioration and that it therefore indicates ability prior to the onset of a pathological condition.

The score on the Vocabulary subtest is not used in arriving at a subject's IQ, but is the basis on which the Vocabulary Scatter is computed[2].

Arithmetical Reasoning.

The ability to solve arithmetical problems has long been recognised as a sign of mental alertness, and Wechsler states that most intelligence tests include items calling for arithmetical reasoning in some form, although results may be influenced to some extent by education and occupational pursuits, as well as by fluctuations of attention and transient emotional reactions. Watson suggests that a poor arithmetic score in a subject of generally low intelligence may reflect poor schooling, lack of opportunity or necessity for learning, or mental defect.

The knowledge required to solve the arithmetical problems in the

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[1] Wechsler, 1944, Op. Cit., p. 98.

[2] See Chapter II of this section.

Wechsler-Bellevue Scale is elementary, and Reichard and Schafer consider it primarily as a test of voluntary concentration and the ability to summon up appropriate knowledge in a limited time. Rapaport deals with this subtest as a test of concentration, which he regards as a voluntary effort involving the focusing of consciousness upon the current topic by exclusion of other emotional or thought contents; he emphasises the effortful character of concentration which may be characterised as an active relationship to outside reality, and considers both the Arithmetic and Digit Span subtests to be far more vulnerable to maladjustment than the other verbal subtests. Cohen confirms that this subtest measures freedom from distractibility in psychoneurotics.

Digit Span.

Although memory span for digits, either forwards or backwards, correlates poorly with other tests of intelligence, and the ability involved contains little of 'g', Wechsler decided to retain this subtest because (a) it is a good measure of intelligence at the lower levels, and (b) difficulty in repetition of digits is often of diagnostic significance in certain organic and other types of cases. Low scores on this test are frequently associated with attention defects, and a poor performance on digits backwards often correlates with lack of ability in doing intellectual work which requires concentrated effort.

Reichard and Schafer look upon Digit Span as a test of attention showing the degree of freedom of receptivity which may be disturbed by intense affects and anxieties. Rapaport considers attention, in this context[1], as "an effortless, passive, unhampered contact with outside reality - a free receptivity", which appears to be hampered if the subject's affects and anxieties are not well-controlled and get out of balance, and which is also affected by overalent (emotionally overloaded) ideas such as vagaries, phantasies, obsessions or delusions which may be able to encroach upon attention. For these reasons, he considers Digit Span to be among the most vulnerable and the most variable subtests. In contrast to the voluntary effort involved in concentration, attention may be regarded as automatic.

Apart from its use in making certain clinical diagnoses of organic defects, Freeman suggests that this subtest is also a test of immediate recall, or immediate memory span which in addition may indicate an inability to apply the attention necessary in solving more difficult mental tasks. Both Watson and Patterson agree that performance on this test can be disturbed by

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[1] Rapaport, Op. Cit., p. 168.

maladjustment or by tension and anxiety "even in more or less normal individuals."

Picture Completion.

This test requires the subject to discover and name the missing part of an incompletely drawn picture, and is particularly good in testing intelligence at the lower levels, although there is a tendency for scores to pile up at the upper end of the distribution table. Ostensibly, according to Wechsler, it measures the individual's basic perceptual and conceptual abilities insofar as these are involved in the visual recognition and identification of familiar objects and forms; thus, in a broad way, the test measures the ability of the individual to differentiate essential from unessential details. Picture Completion in Rapaport's opinion also involves visual concentration, i.e. concentration acting upon visually-perceived material.

Picture Arrangement.

In this test a series of pictures is presented to the subject in a disarranged order, and he is asked to put them in the right order so that they make a sensible story. The correct order is the one originally given by the artist, but in the more difficult series lesser credits are also given for other arrangements provided that these are supported by the story told by the subject.

Wechsler considers this to be the type of test which effectively measures a subject's ability to comprehend and size up a total situation, the subject matter always involving some human or practical situation. The understanding of these situations more nearly corresponds to what other writers have referred to as "social intelligence", an entity in which Wechsler himself does not believe, and which he considers rather to be just general intelligence applied to social situations.

Reichard and Schafer consider that this test measures planning ability, which is related to judgment, and shows correct anticipation and attitude on the part of the subject. Rapaport agrees that planning and anticipation figure largely in the Picture Arrangement test, since the subject's achievement is a reflection of his ability to anticipate the consequences of initial acts or situations and hence is a reflection of his planning ability. He contends that disturbances in anticipation make planning impossible, and result in failures on Picture Arrangement. These failures, he says, may be due either to lack of anticipation and/or to false anticipation determined by

emotionally overloaded ideas. He adds that the planning on this subtest implies both attentionand judgment, and requires visual organisation as well.

Block Design.

The Block Design was originated by Kohs who offered it as a comprehensive measure of non-verbal intelligence, and in its modified form as incorporated in the present test Wechsler considers it to be the best single performance item. Both Freeman and Cohen consider this subtest to be valuable as a measure of the G-factor. It involves both analytic and synthetic ability as the subject must first analyse the total picture in order to build it up from parts, and it lends itself admirably to qualitative analysis. Differences of attitude and emotional reaction on the part of the subject are also apparent in his performance; one can distinguish the hasty and impulsive from the deliberate and careful type, the subject who gives up easily and in disgust from the one who persists even after the time limit has expired, and a number of other temperamental traits which manifest themselves during the performance. Diagnostically, Wechsler claims that it is an excellent measure of deterioration, either early as in some cases of brain disease or damage, or late as in approaching senility. According to Reichard and Schafer, performance is also impaired in this, as in Object Assembly and Digit Symbols, by long-standing drug addiction, acute toxic states and depression.

Visual-motor co-ordination is given by Rapaport as a common factor in the Block Design, Object Assembly and Digit Symbol subtests, although he distinguishes between the types as reproductive, productive and imitative respectively. This co-ordination, he maintains, is affected by the impact of acute tension, anxiety and hyperactivity on motor action.

Object Assembly.

Three formboards, a manikin, a profile and a hand, are presented separately in a mutilated state to the subject in this test, and he is required to put the parts together into the familiar configuration. Wechsler considers this test to be chiefly of clinical value, as it tells something about the subject's mode of perception, the degree to which he relies on trial and error methods, the manner in which he reacts to mistakes, his capacity to persist at a task, and his reaction to frustration or lack of success.

The visual-motor ability involved has already been mentioned and Rapaport points out that the less crystallised and keen the visual organisation is, the more important is the rôle given to trial motor activity.

Both Wechsler and Rapaport consider this test primarily useful for

qualitative appraisal of work methods.

Digit Symbols.

The subject is required in this test to associate certain symbols with certain other symbols, and the speed and accuracy with which he does this serve as a measure of his intellectual ability. Wechsler found that scores on this subtest decline rapidly with age, and that neurotic and unstable individuals tend to do badly on it. In the latter cases, it may be due to a certain associative inflexibility in the subject and a tendency toward mental confusion, but Wechsler thinks a further reason may be that neurotic subjects have difficulty in concentrating and applying themselves for any length of time, and experience an emotional reactivity to any task requiring persistent effort. He suggests that the poor performance of the neurotic represents a lessened mental efficiency rather than an impairment of intellectual ability. As speed is important in this test, Patterson points out that neurotic tension and anxiety affect the attention and concentration required.

Rapaport considers that performance on this subtest implies visual activity, motor activity and a learning process. Visual memory is also mentioned by Freeman. However, because of the fleeting and nonsense character of the material to be learned, Rapaport considers visual-motor co-ordination (imitative) to be of primary importance.

Cohen found this test to be a fairly good measure of 'g', second only among the performance tests to Block Design and especially good for schizophrenics.

2. Diagnostic Claims.

Wechsler maintains that any well conceived intelligence scale should furnish its user with something more than a mere IQ or MA, and that such additional data should not be entirely dependent upon the individual examiner's clinical experience and sagacity. Rapaport believes that "to use the Wechsler-Bellevue as a mere intelligence test is to neglect the diagnostic potentialities to be found in the dynamic relationship of its subtests to each other."[1]

The most obviously useful feature of the Scale is considered by Wechsler himself to be its division into a verbal and a performance part, which makes possible a comparison between a subject's facility in using words and symbols and his ability to manipulate objects and to perceive visual patterns. Large discrepancies between these two parts of the test are clinically

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[1] Rapaport, Op. Cit., p. 9.

frequently associated with certain types of mental pathology. The loss, due to a mental disorder, of a person's functioning capacity is generally not uniform, but affects certain abilities more than others, and in most mental disorders this impairment is usually greater in the performance than the verbal sphere. This applies in all psychoses, organic brain disease, and to a lesser extent in most psychoneuroses. Variations of from 8 to 10 points between verbal and performance IQs may be considered normal, and even greater differences may sometimes be accounted for by the subject's age and occupation, and even by racial and group differences. Subjects of superior intelligence generally do better on the verbal part of the test.

The second clinically useful feature of the Bellevue scale Wechsler gives as the fact that the different mental abilities tested by it may be compared at all levels of functioning. Raw scores on the individual subtests of the scale are converted to weighted scores in a distribution having a mean of 10 and a standard deviation of 3, so that they are all equated and directly comparable with each other. An individual's significant deviation on any subtest from his own total subtest mean is roughly proportional to the magnitude of his total score. As a rough guide, Wechsler gives the following rule of thumb: For individuals whose total raw score is from 80 to 110, a difference of more than two points from the mean subtest score is significant. For subjects with total scores beyond these limits, a significant deviation is obtained by dividing the mean subtest score by four. This is best illustrated by two examples.

(1) Subject A has a total weighted score of 98 for the 10 subtests, M = 9.8; a significant deviation would be more than two points, i.e. 11.8 (12) or 7.8 (7). Thus any subtest on which this subject had a weighted score of 7 or less, or 12 or more, would be of significance in analysing his test pattern.

(2) Subject B has a total weighted score of 124, M = 12.4; a significant deviation here would be $\frac{12.4}{4}$ or 3.1, and so any subtest weighted score of $12.4 \pm 3.1$, i.e. 15.5 (16) or 9.3 (9) would be of significance.

Clinical experience with the Bellevue scale has enabled Wechsler to present certain empirical findings in the form of a table which attempts to summarise the subtest patterning found in various common mental disease entities, particularly in organic brain disease, schizophrenics, neurotics, adolescent psychopaths and mental defectives. He emphasises, especially in regard to schizophrenia, that no single list of signs (significant deviations) can be either sufficiently comprehansive or free from exceptions if not contradictions; and further that the table is valuable in proportion to the

user's familiarity with the scale as a whole and his clinical acquaintance with the disease entities, and is not intended, nor can it be used, as a psychometric short cut to psychiatric diagnosis.

In addition to the table of "signs", Wechsler also gives the general symptoms of the disease entities mentioned, and some qualitative indicators which often reveal themselves in the form or content of a subject's responses. Such qualities as perseveration, redundancy, negativism, pedantry, hesitation, contradiction, circumlocution, use of clichés, irrelevance, etc., may be particularly indicative when taken in conjunction with test subscores and disease symptoms, in the "normal" person they often give a clear indication of the subject's personality. Rapaport states[1] that every 'normal' man contains within himself, to a greater or lesser degree, trends towards the various clinical maladjustments, and that these mild manifestations of maladjustment in normals express themselves in test performances by indicators similar to those seen in pathological cases. This should therefore be taken account of in any 'normal' population group which is used as a control group in any study.

3. Surveys on Atypical Groups.

In spite of Wechsler's warning that a mere table of signs is insufficient to form any clinical diagnosis, the publication of his book and also that of the Menninger group[2], led to a spate of study and research by clinicians, who attempted to draw inferences about personality and clinical diagnosis from the intersubtest differences of Wechsler-Bellevue records. The results from this enormous research literature have been characterised by Magaret as "negative, conflicting, or questionable."[3]

This research has followed two main lines. Enthusiastic proponents have attempted to collect evidence for the validity of pattern analysis, alternatively referred to as scatter or profile analysis, by research in which the scores of various criterion groups of patients are compared with those of controls. Significant differences in subtest scores are offered as differentially diagnostic signs. Evidence against the validity of pattern analysis is usually from one of three kinds of investigation: (1) subtest by subtest comparisons as cited above, which fail to produce significant differences; (2) previously adduced signs or patterns which are not substantiated

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[1] Rapaport, Op. Cit., p. 30. [2] Rapaport, Ibid.

[3] Magaret, quoted by Jacob Cohen, The Efficacy of Diagnostic Pattern Analysis with the Wechsler-Bellevue, J. Consult. Psychol., 19:4, Aug. 1955, 303 - 306.

when applied to new samples; and (3) the reworking of previously published data to demonstrate that, in fact, no such patterns exist as have been claimed.

Cohen criticises these methods by pointing out that they frequently overlook the effects of extraneous variables which may have been present in the matching of the groups, and that there is no guarantee that the differences are large enough to lead to fruitful application in individual cases. Schafer considers that large samples which cancel out great individual differences are not always desirable, since the individual differences are to be established and understood, and not cancelled out; he says[1], "The shaky results from a small sample have greater heuristic and clinical potential than the formidable summary scores of huge but inherently chaotic samples."

Research along the lines mentioned has been carried out, using the Wechsler-Bellevue test, on many different groups of subjects with the object of either proving or disproving the validity of subtest score patterns. Some of the groups used have been neurotic, schizophrenic, moronic, brain-damaged, psychopathic personality, behaviour problem cases, manic-depressives, anxiety neurosis patients, etc.; but the many results are so divergent and conflicting that it is impossible to make any generalisations. It is essential to bear in mind that (a) the Wechsler-Bellevue is an individual test; (b) subtest scores may be influenced by such factors as age, cultural and educational background, occupation and interest, and special abilities or disabilities; and (c) qualitative findings, including the type of failure, are important.

Another difficulty derives from the ambiguity of many clinical cases. Classical clinical syndromes are the exception rather than the rule, so much so that in many cases a clearcut diagnosis is difficult. A patient is usually finally classified because of the predominance of any one symptom over all others, which does not imply that other symptoms are not observable. If such a difficulty arises in the clinical diagnosis and classification of psychotic or neurotic patients, it becomes clear that any attempt to find similar textbook signs in a patient's numerical scattergram is likely to lead to conflicting results in individual cases. As has been observed, this is in fact the case. Little purpose seems to be served in comparing the scattergrams of different psychotic groups, in whom the same symptom may be present to a greater or lesser degree. Neurotic anxiety patients, for example, are so classified because of the predominance in their syndromes of acute or chronic anxiety; but anxiety to some extent is also found in most psychoneurotic cases as well as in certain types of schizophrenia. To bring out the diagnostic significance

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[1] Roy Schafer, Psychological Tests in Clinical Research, J. Consult. Psychol., 13:5, Oct. 1949, 328 - 334.

of certain scattergrams, it is therefore generally more useful to compare psychotic or psychoneurotic patients with normals, rather than among themselves; but even here variability within each group may serve to blurr the typical pattern.

Since most of the research has been carried out on hospitalised psychotic groups, it is not entirely relevant to any findings on the present non-institutionalised test group, but has merely been mentioned en passant to point out that subtest scores and patterns, without reference to other findings, have not been found to be conclusive in isolating groups of patients. Surveys on psychoneurotic patients, however, may be of some interest. Freeman[1], for example, found the subtest pattern of a neurotic group to be relatively superior on the four essentially verbal tests, relatively low on Digit Span, Picture Arrangement, Object Assembly and Digit Symbol, and average on Arithmetic, Picture Completion and Block Design. Warner[2], on the other hand, using 60 anxiety neurosis subjects, with 33 non-maladjusted subjects together with Rapaport's 32 well-adjusted patrolmen as controls, was unable to substantiate either the generalisation that intertest variability in neurotics is greater than that of normal subjects, or that the neurotic's performance is generally lower than his verbal score, or that Arithmetic and Digit Span scores differentiate between neurotics and controls. Similarly, Lewinski[3], using 25 patients with anxiety neurosis, was unable to confirm Wechsler's contention that psychoneurotics usually score higher on verbal than on performance subtests. In contrast to the last point raised by Warner, however, Moldawsky and Moldawsky[4] did find a significant drop in Digit Span score as compared with Vocabulary when testing college students in an anxiety producing atmosphere. Rabin[5], when comparing normal and psychoneurotic groups, found differences of very little significance between the groups, a finding confirmed by Monroe[6].

This type of research, i.e. relying chiefly on scatter analysis and significant differences between various groups, may be criticised on various grounds. As Schafer[7] points out, a statistically established group trend

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[1]Freeman, Op. Cit., p. 336.

[2]Samuel J. Warner, The Wechsler-Bellevue Psychometric Pattern in Anxiety Neurosis, J. Consult. Psychol., 14, 1950, 297 - 304.

[3]Robert J. Lewinski, The Psychometric Pattern. 1, Anxiety Neurosis, J. Clin. Psychol., 1:3, June 1945, 214 - 221.

[4]Stanley Moldawsky and Patricia Corcoran Moldawsky, Digit Span as an Anxiety Indicator, J. Consult. Psychol., 16:2, Apr. 1952, 115 - 118.

[5]A. I. Rabin, Differentiating Psychometric Patterns in Schizophrenia and Manic Depressive Psychosis, J. Abn. Soc. Psychol., 37:2, Apr. 1942, 270 - 272.

[6]Jack J. Monroe, Effects of Emotional Adjustment and Intelligence upon Bellevue Scatter, J. Consult. Psychol., 16:2, Apr. 1952, 110 - 114.

[7]Schafer, Op. Cit., p. 329.

merely means that relatively many of that group show that trend; "the question still remains, 'What about the remaining members of the group - those who do not show the trend?'" Watson emphasises that the application of rationale should be made more meaningful in applying individual tests, whilst differing educational and cultural backgrounds, which might blur or exaggerate certain results, should be taken into consideration to a greater extent than it usually is. He repeats Wechsler's warning[1], "The Wechsler-Bellevue scale is a valuable clinical instrument but it does not allow the substitution of a list of diagnostic signs for clinical acumen." Carter and Bowles[2] refer to the "evils of numeralising, frequently resulting in the neglect of the details of testing situations," and add that "there does not appear to be even a normal pattern, i.e. non-psychopathological." Derner et al[3] urge caution in interpreting the meaning of subtest deviations, since the degree of reliability is often too low to warrant more than the most tenuous hypotheses.

It seems that most of these criticisms were not borne in mind by Cohen in his recent experiment[4], in which he took 300 neuropsychiatrically diagnosed patients, comprising psychoneurotic, schizophrenic and brain-damaged groups, and requested seven experienced clinicians to classify each pattern into one of the three groups. Only one clinician correctly diagnosed a significant number of these 300 patients, and only two others had extra-chance success in the diagnosis of a single group, the brain damaged group in both cases. From this he concluded that "although there is some non-chance relationship between Wechsler-Bellevue pattern and neuropsychiatric diagnosis, it is detectable for only some clinicians and then only to so small a degree as to be of little practical utility." The important points which Cohen either overlooked or failed to mention in his report, cover precisely the aspects that have been stressed by Wechsler and others as requiring attention. Under procedure, for example, he says, "The 300 patterns were randomly ordered and submitted to each psychologist individually." Cohen does not state whether additional notes were made available in connection with psychomotor activity, obvious neurotic symptoms (e.g. stuttering, tics), or such physiological symptoms as perspiring, blushing, moist hands, etc., which would have been important indications especially in the psychoneurotic cases. If, as implied, the clinicians were merely given the subtest patterns, they

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[1] Watson, The Use of the Wechsler-Bellevue Scales : a Supplement, Psychol. Bull., 43:1, Jan. 1946, 61 - 68.

[2] Jerry W. Carter, Jnr., and J. W. Bowles, Jnr., A Manual on Qualitative Aspects of Psychological Examining, J. Clin. Psychol., 4:2, Apr. 1948, 112 - 150.

[3] Gordon F. Derner, Murray Aborn and Aaron H. Canter, The Reliability of the Wechsler-Bellevue Subtests and Scales, J. Consult. Psychol., 14, 1950, 172-179

[4] Cohen, Op. Cit. (1955)

were unable to make any sort of qualitative analyses, either in the quality of verbalisation (important in the schizophrenic group) or of the individual items failed and the type of failure in each case.

The scattergrams obtained by any individual or group on the Wechsler-Bellevue scale cannot be expected to differentiate to any fine degree between various psychiatric syndromes, particularly where overlap of symptoms occurs. The most that has been claimed for these scattergrams, from the diagnostic viewpoint, is that they show general trends of the predominant symptoms within a group. In individual cases, these trends may be confirmed or emphasised by qualitative analyses, which apparently were not made available to the clinicians in Cohen's study.

In the present test and control groups of non-psychotic subjects, any quantitative signs which may emerge may perhaps more profitably be interpreted as indications of personality trend falling within the limits of normality. This will serve to support Wechsler's contention that scattergrams serve a useful purpose in indicating such trends even within a non-psychiatric population, and that they may therefore, with some confidence, be used as a tool in the diagnosis of patients in whom certain symptoms predominate and in whose test performance these symptoms are corroborated by qualitative signs and the observations of the clinician during the test situation.

## II. RESULTS.

### 1. Intelligence Quotients.

Of the eleven subtests comprising the Wechsler-Bellevue Scale, only ten are used in computing a subject's IQ, the Vocabulary test being omitted. Thus five verbal (Information, Comprehension, Arithmetic, Digit Span and Similarities) and five performance (Picture Completion, Object Assembly, Block Design, Digit Symbol and Picture Arrangement) subtests are used. The total weighted scores for these ten subtests are converted into IQs, based on a mean of 100 and S.D. of $\pm$15, or a probable error of 10. Since in a normal distribution 50% of the cases fall within one probable error above and below the mean, Wechsler defined 'average' intelligence to include IQs from 91 to 110. IQs are computed separately for verbal ability, performance ability and general rating which is an overall rating based on the combined verbal and performance results.

Although there is no significant difference between the general IQ of the sexes in either the test or control groups, the possibility exists in a composite test such as the Wechsler-Bellevue that males may score more heavily than females on certain subtests, and that females may compensate on others. There is also the possibility that females' test results may be affected by the syndrome referred to by Frank as premenstrual tension, which may involve, amongst other symptoms, nervousness, depression and feelings of tenseness[1]. These symptoms might be expected to become apparent in the subtests which measure concentration, such as Arithmetic, Digit Span and Digit Symbol; but with the notable exception of Arithmetic, the females in the present study score as high as the males on these tests. In the Arithmetic subtest, some other factor may influence the results.

In dealing with 145 male and 90 female outpatients at a psychiatric clinic, Strange and Palmer found significant sex differences in all subtests except Vocabulary, Picture Arrangement and Digit Symbol, and also in the three IQs (verbal, performance and general); all differences favoured the males, seven, which included both the verbal and total IQs, being significant at the .01 level at least[2].

It has not yet been ascertained from the South African population

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[1] E. Y. Williams and L. R. Weekes, Premenstrual Tension Associated with Psychotic Episodes, J. Ner. Men. Dis., ;;6:4, Oct. 1952, 321 - 329.

[2] Frank B. Strange and James O. Palmer, A Note on Sex Differences on the Wechsler-Bellevue Tests, J. Clin. Psychol., 9:1, Jan. 1953, 85 - 87.

sample whether there are sex differences in the subtest patterns of the Wechsler-Bellevue, but the males in both the present test and control groups scored significantly higher than the females on both Information and Arithmetic subtests, their verbal IQ was higher, and, in the test group only, Block Design was higher. The sex differences are shown in Table XX.

Sex Differences in Sub-Test Scores.

| | Weighted Score M TEST GROUP | | | | Weighted Score M CONTROL GROUP | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | t | p | Male | Female | t | p |
| Inf. | 12.44 | 11.54 | 2.2313 | .02* | 11.80 | 10.72 | 2.3193 | .02* |
| Comp. | 12.82 | 13.16 | .9913 | .33 | 11.54 | 11.20 | .8046 | .42 |
| Arith. | 13.18 | 11.12 | 2.9775 | .004* | 11.80 | 9.92 | 2.7627 | .008* |
| D. Sp. | 10.88 | 9.98 | 1.5947 | .11 | 9.82 | 9.28 | .9319 | .34 |
| Sim. | 13.82 | 14.48 | 1.5770 | .11 | 13.18 | 13.12 | .1152 | > .9 |
| Vocab. | 11.98 | 11.80 | .4305 | .65 | 10.82 | 10.40 | .8105 | .41 |
| Ver. IQ | 119.90 | 117.04 | 2.1816 | .03* | 114.34 | 110.14 | 2.0491 | .04* |
| P.C. | 13.20 | 13.00 | .6681 | .50 | 12.40 | 12.00 | 1.0206 | .30 |
| O.A. | 9.36 | 9.58 | .3765 | .70 | 9.50 | 9.42 | .1559 | .89 |
| B.D. | 13.16 | 11.88 | 2.4950 | .015* | 12.20 | 11.40 | 1.6357 | .10 |
| D. Sym. | 10.58 | 11.00 | .8198 | .41 | 8.98 | 9.30 | .6801 | .5 |
| P.A. | 10.74 | 10.88 | .2431 | .80 | 10.66 | 9.52 | 1.7938 | .07 |
| Perf. IQ | 116.86 | 116.98 | .0614 | .95 | 112.92 | 111.28 | .8855 | .38 |
| Gen. IQ | 119.94 | 118.38 | .9047 | .37 | 114.84 | 111.42 | 1.8334 | .07 |

*Statistically significant.

TABLE XX.

In comparing the test and control groups, it will be seen from Table XXI that the test group, both males and females, have significantly higher scores than the control group on the two verbal subtests, Comprehension and Vocabulary, and on the two performance subtests Picture Completion and and Digit Symbol; in addition, the male test group has a significantly higher score on Block Design, and the female test group on Similarities and Picture Arrangement. According to the rationale previously set out[1], it seems that the test group of homosexuals, both male and female, have a greater ability to evaluate past experience, to observe and differentiate essential from unessential details, and to possess motor speed and not display as a group the associative inflexibility, mental confusion and lack of application which poor

[1] See pp. 137 - 145.

performance on Digit Symbols has been said to indicate. Apart from this suggestion, which negates indications of neurotic instability, the results are qhat might be expected, i.e. that homosexuals, by virtue of their way of life in our society, learn from past experience and become observant in their daily lives.

If scores on Vocabulary are an indication of general intelligence level, then again the significantly high scores for both males and females of the test group are in keeping with the IQs obtained, where verbal, performance and general IQs are all significantly higher in the test group than in the control group. These findings apply to both sexes and are shown in Table XXI below.

The performance IQs in each group are lower than the verbal IQs, a finding which does not lend support to the theory that homosexuals belong to the psychopathic personality group.

Homosexual-Heterosexual Differences in Subtest Scores.

| | Weighted Score M. MALES | | | | Weighted Score M FEMALES | | | |
|---|---|---|---|---|---|---|---|---|
| | Test Group | Control Group | t | p | Test Group | Control Group | t | p |
| Inf. | 12.44 | 11.80 | 1.6452 | .10 | 11.54 | 10.72 | 1.7165 | .09 |
| Comp. | 12.82 | 11.54 | 3.3371 | < .001* | 13.16 | 11.20 | 5.0761 | < .001* |
| Arith. | 13.18 | 11.80 | 1.8784 | .07 | 11.12 | 9.92 | 1.8927 | .07 |
| D. Sp. | 10.88 | 9.82 | 1.8280 | .07 | 9.98 | 9.28 | 1.2413 | .20 |
| Sim. | 13.82 | 13.18 | 1.4687 | .15 | 14.48 | 13.12 | 2.6843 | .009* |
| Vocab. | 11.98 | 10.82 | 2.7515 | .007* | 11.80 | 10.40 | 2.7165 | .007* |
| Ver. IQ | 119.90 | 114.34 | 2.8460 | .007* | 117.04 | 110.14 | 3.5957 | < .001* |
| P.C. | 13.20 | 12.40 | 2.4343 | .015* | 13.00 | 12.00 | 2.7196 | .007* |
| O.A. | 9.36 | 9.50 | .2387 | .8 | 9.58 | 9.42 | .3132 | .75 |
| B.D. | 13.16 | 12.20 | 2.0758 | .04* | 11.88 | 11.40 | .8936 | .32 |
| D. Sym. | 10.58 | 8.98 | 3.2575 | .001* | 11.00 | 9.30 | 3.4515 | < .001* |
| P.A. | 10.74 | 10.66 | .1343 | .9 | 10.88 | 9.52 | 2.2041 | .03* |
| Perf. IQ | 116.86 | 112.92 | 2.0244 | .05* | 116.98 | 111.28 | 3.0660 | .005* |
| Gen. IQ | 119.94 | 114.84 | 2.9743 | .005* | 118.38 | 111.42 | 3.7631 | < .001* |

*Statistically significant.

TABLE XXI.

Some possible suggestions which might account for the IQs obtained in this survey are:-

(1) the IQs obtained may have been influenced to some extent by variables other than age, education and occupation;

(2) the homosexual group is, because of the necessity to avoid detection, more alert and therefore mentally quicker;

(3) the wider range of interests of the homosexual group, and particularly cultural interests, is reflected in the test results;

(4) the homosexual, consciously or otherwise, develops his innate capabilities more fully in order to be more self-sufficient and less reliant on a society which does not tolerate his way of life;

(5) with the very early development in many homosexuals of a feeling of being "different", innate abilities may be more fully developed as a form of compensation.

Whatever the explanation, however, the differences in intelligence between the 100 homosexuals and the control group of heterosexuals who form the subjects of this survey are pronounced, in spite of the fact that the mean IQ in each group is above the average as tabled by Wechsler. This finding agrees with those of Kahn on inmates of penal institutions, of Loeser on sexual psychopaths in the military service, and of Campbell on "true inverts" in the military service, and also supports what has previously been expressed as opinion by Ellis, Greenspan and Campbell, Hirschfeld, Freud, Terman and Miles, Slater and Slater, and Clifford Allen.[1]

2. Scatter.

The concept of scatter is the relationship to each other of the functions underlying an individual's achievements on different subtests, i.e. the intra-individual comparison of functions underlying test performances. The scatter is the pattern formed by the distribution of the weighted scores of the Wechsler-Bellevue subtests, and implies the relationship of any two weighted subtest scores or the relationship of any single subtest score to the central tendency of all the subtest scores, however this central tendency may be determined.

In order to give a statistical treatment of patterns which should be useful and meaningful in clinical cases, Rapaport[2] uses three measures of scatter, viz: (a) Vocabulary Scatter, (b) Mean Scatter, and (c) Modified Mean Scatter. He compares the scatter patterns of various clinical groups

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[1] See pp. 53 ff.

[2] Rapaport, Op. Cit., pp. 48 ff.

with those of a non-clinical control group of Highway Patrolmen.

Vocabulary Scatter.

Jastak[1] gives two advantages of comparing vocabulary score with other test scores. One is that vocabulary yields one of the most stable ratings used in psychometric examinations, and the other that vocabulary is relatively invulnerable to the presence of disorders and disturbances such as are observed in psychotic persons. Being uninfluenced by mental disorganisation, vocabulary therefore serves as an index of native capacity, whilst more highly sensitive efficiency tests, being reduced by mental disturbances, serve as measures of sanity, and the relationship between the two types of test may therefore be used to determine the degree of deterioration. Rapaport agrees with these arguments, and gives statistical confirmation that vocabulary is the least variable and one of the best retained of all the subtests, and may therefore be used as an indicator of original intelligence level and as a standard of comparison for other subtests. Accordingly Vocabulary Scatter measures the drop of efficiency of one or more functions below the hypothetical original level of the individual.

The Vocabulary Scatter of a subtest is the difference between its score and the score on Vocabulary. Since the average score of Vocabulary is among the highest of the subtests, most of the Vocabulary Scatters must be negative. Negative scatter from the Vocabulary is usually a liability in a subject or a group, and positive scatter from the Vocabulary is usually an asset; the algebraic sum of the negative and positive scatters shows whether assets or liabilities predominate in the subject or group.

Positive and Negative Vocabulary Scatter.

To obtain the average Positive Verbal Scatter of a group, the Vocabulary score of each individual in this group is subtracted from each of his five verbal scores; all of these differences which are positive are added up for the total group, and this sum divided by the number of subjects in the group. Such an average therefore represents the extent of the rise of the verbal subtest scores above the Vocabulary level, where such rises are present. The other three averages, Negative Verbal, Positive Performance and Negative Performance, are obtained in the same way.

In clinical groups, where there is impairment of efficiency of different functions, the Negative Scatter is always much greater than the

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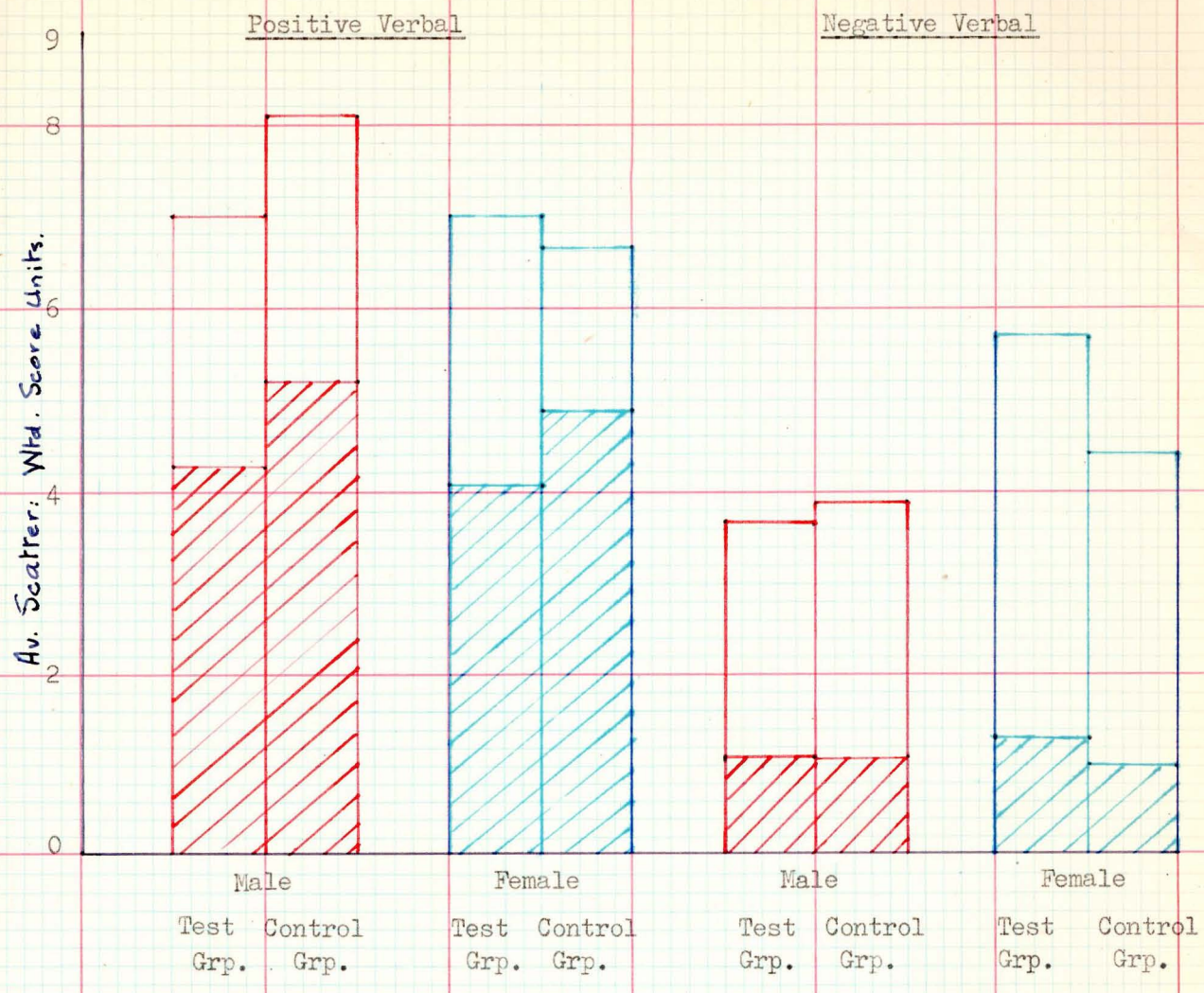
[1]Joseph Jastak, Problems of Psychometric Scatter Analysis, Psychol. Bull., 46:3, May 1949, 177 - 197.

Positive, and the average Negative Scatter of a particular clinical group may be as high as 26 points. In non-clinical groups, average Positive and Negative Vocabulary Scatters cluster relatively close together, i.e. subtest scores are closer to Vocabulary level, and fairly evenly distributed on both sides of it. In Rapaport's control group of normal, well-adjusted Highway Patrolmen, for example, there was an average Negative Performance Scatter of 10, and an average Negative Verbal Scatter of 2. Groups of neurotics, which included anxiety and depression neurotics, obsessive-compulsive neurotics and neurasthenics, had an average Negative Performance Scatter of 13. Average scatters of up to 10 points may therefore be considered normal since they occur in a well-adjusted group of people; extreme predominance of Negative Scatter is an indicator of psychosis, and specific predominance of Negative Scatter of Performance subtests points to the presence of a Depressive Psychosis.

In the present survey, all mean Vocabulary Scatters fall within the limits of 10, the highest scatter being +8.16, which occurred in the Positive Verbal Scatter of the male control group. A comparison of the average Positive and Negative Verbal and Performance Scatters for the test and control groups is shown in Figure I (overleaf). It will be seen that the Scatters for all four groups, male and female, test and control, follow the same pattern, with very little difference in the scores and all well within the range of normal population scores. The homosexual group, both male and female, have a slightly more pronounced Negative Performance Scatter, together with a lower Positive Performance Scatter, which whilst not being great enough to indicate depression, might be interpreted as a tendency towards a mild degree of anxiety.

In both clinical and control groups, Rapaport found the scatter on Arithmetic and Digit Span to be so great as to cloud the real significance of the rest of the Verbal Scatter. Omitting these two tests therefore gives what he calls the Modified Verbal Scatter, which is a truer indication of actual verbal ability in relation to Vocabulary score. In Figure I, both the Mean Verbal and the Modified Mean Verbal Vocabulary Scatters are shown, the former being the higher score in each case.

Taking the Vocabulary scores as the probable intelligence level of the groups, therefore, it will be seen that the homosexual group shows no more impairment of general functioning, and no more indication of neurosis, than the control group. Supporting this conclusion, Figure 2 shows that the average Positive and Negative Vocabulary Scatter for each subtest is evenly distributed around the Vocabulary score, is not greater than $\pm 3$ for any sub-


Positive Verbal
Negative Verbal
Av. Scatter: Wtd. Score Units.
9
8
6
4
2
0
Male
Female
Male
Female
Test Grp.
Control Grp.
Test Grp.
Control Grp.
Test Grp.
Control Grp.
Test Grp.
Control Grp.

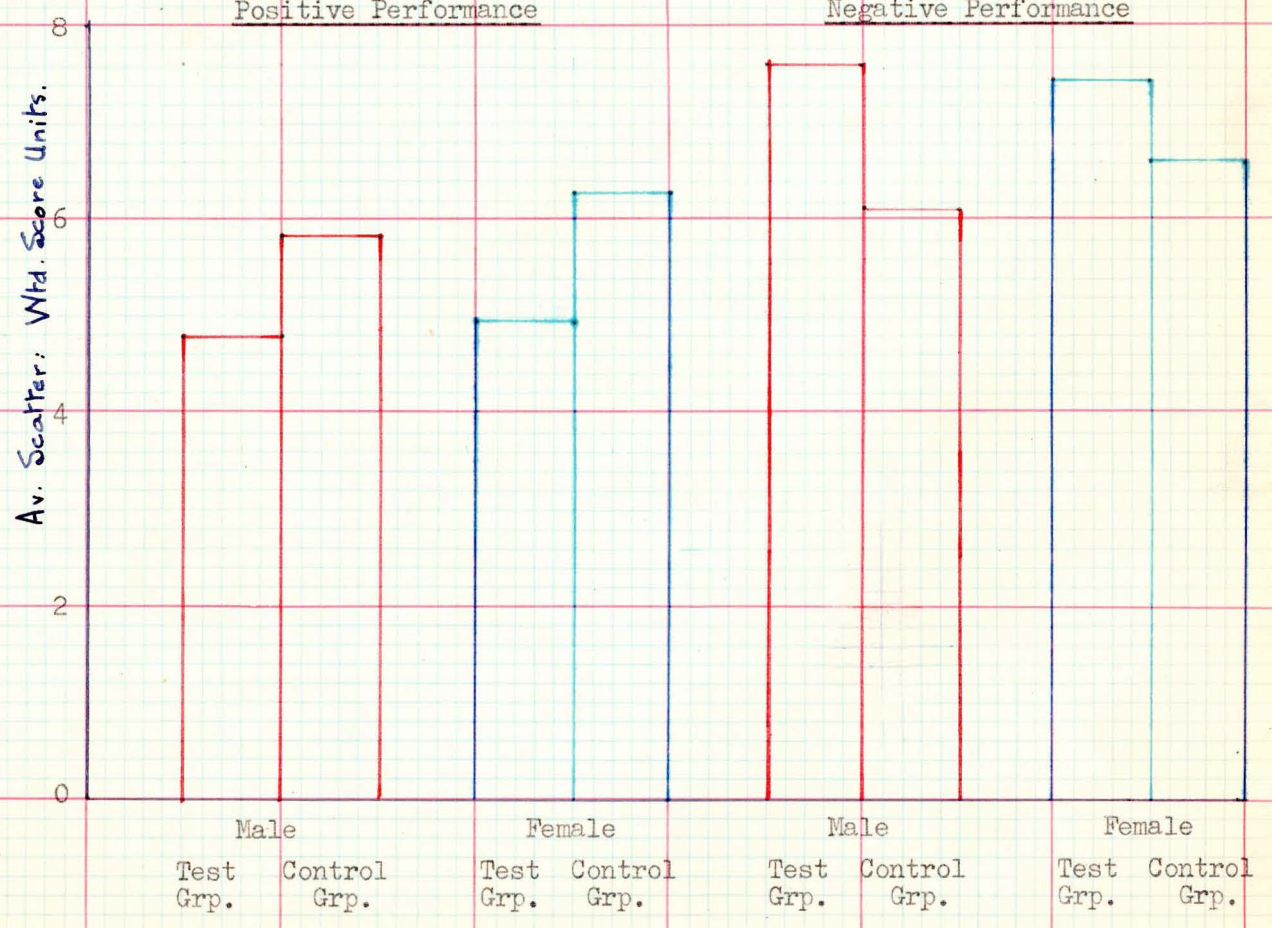
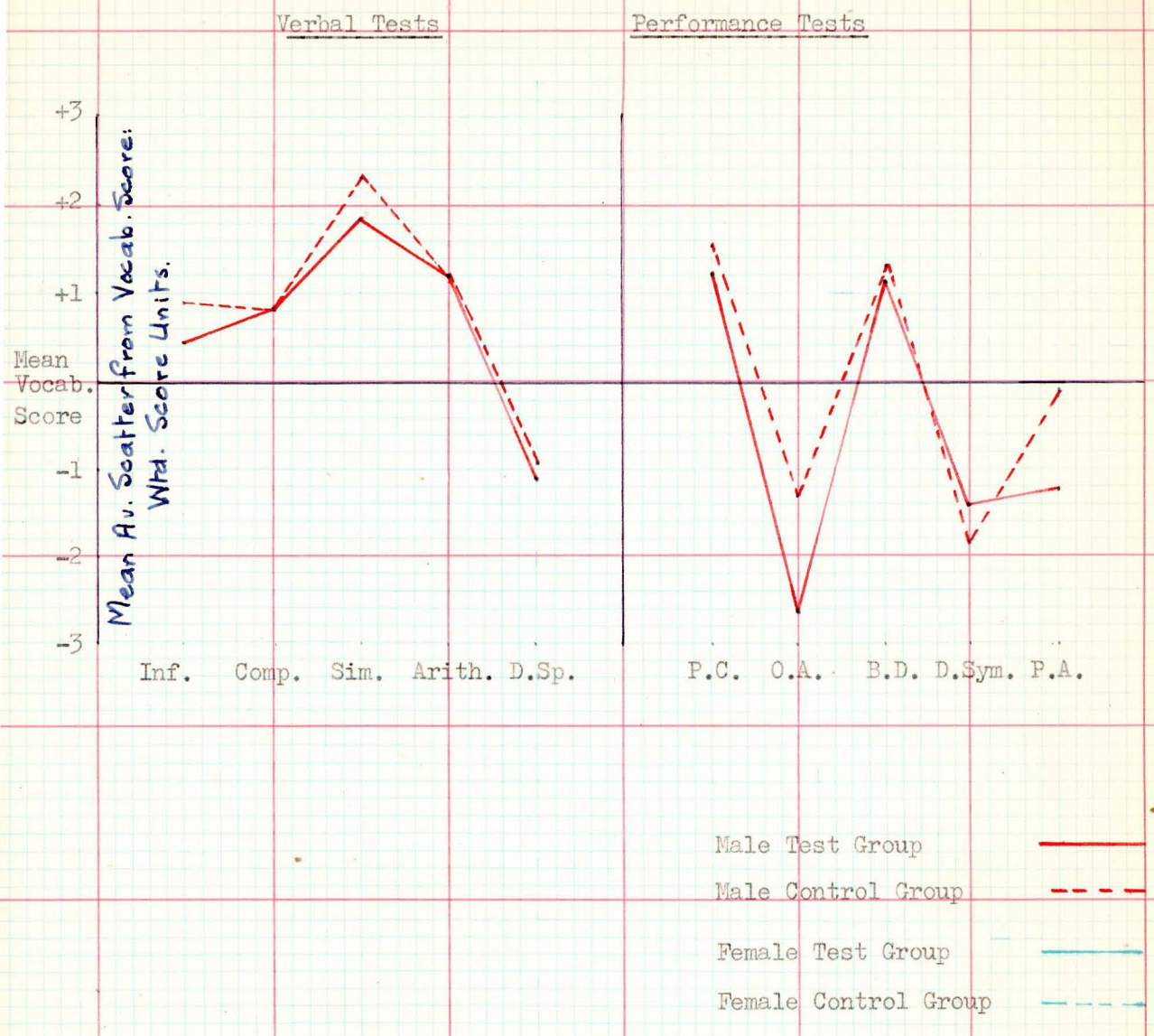

Positive Performance
Negative Performance
Av. Scatter: Wtd. Score Units.
8
6
4
2
0
Male
Female
Male
Female
Test Grp.
Control Grp.
Test Grp.
Control Grp.
Test Grp.
Control Grp.
Test Grp.
Control Grp.

FIG. I.

AVERAGE POSITIVE AND NEGATIVE SUBTEST VOCABULARY SCATTER.



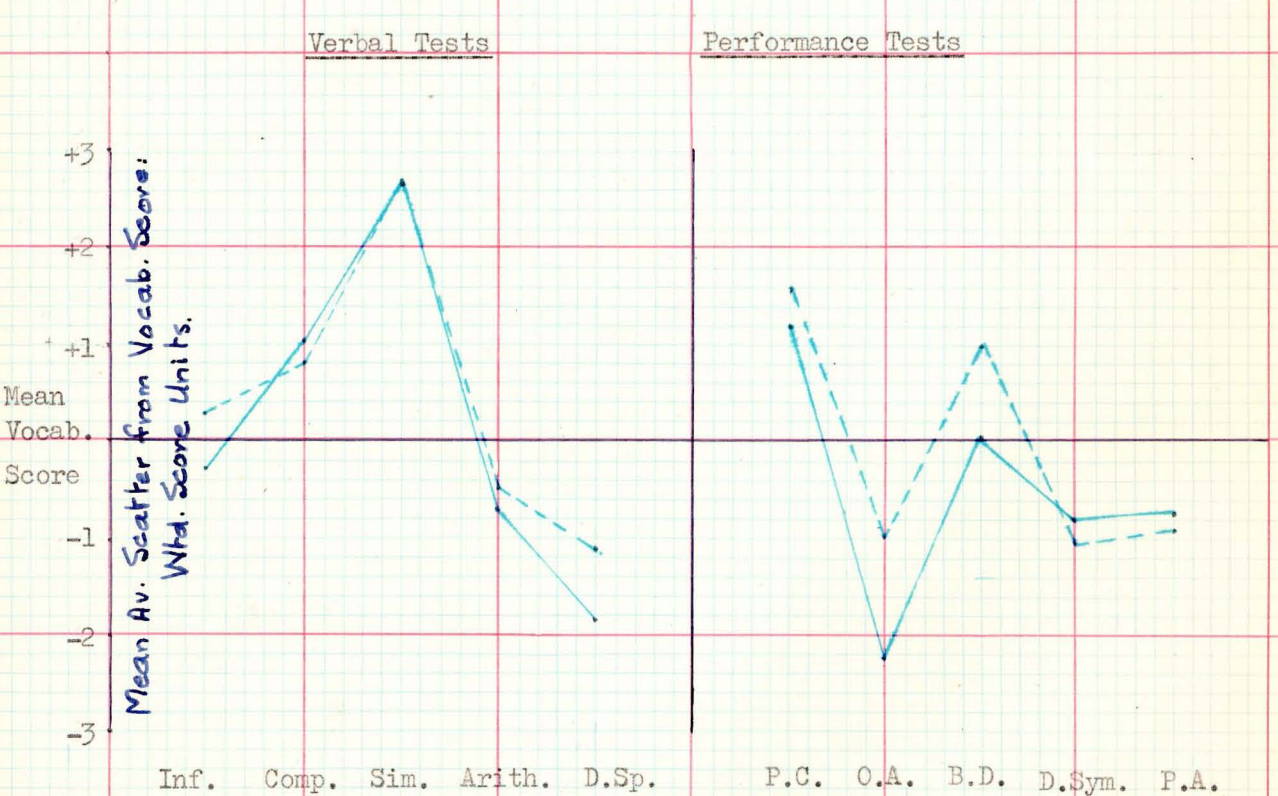




Figure 2.

test and again follows the same general pattern for all four groups.

Figures 1 and 2 show that the group of homosexuals in this survey does not conform to the Scatter Pattern of clinical neurotics, and that there is no pronounced deterioration of ability from their original intelligence level as indicated by Vocabulary score. The differences between the mean Negative Performance Scatter and the mean Positive Performance Scatter is greater for both the males and females of the homosexual group, whereas the heterosexual groups show more nearly the same deviation from Vocabulary score level. This finding is more clearly shown in Figure 3 overleaf, and could be interpreted in one of two ways:

(1) Wechsler states[1] that subjects of superior intelligence generally do better on the verbal part, and subjects of inferior intelligence generally do better on the performance part of the test. Evidence in support of this is given by Estes[2] who found that in a group of 102 college students and recent graduates with a full scale mean IQ of 127, the verbal and performance means respectively were 128 and 119, 79% of the group having greater verbal than performance IQs. He compares these subjects with Rapaport's Patrol group (mean IQ 116) and found that both groups had mean negative Vocabulary scores of -2 on Object Assembly and Picture Arrangement, and 0 to -1 on Digit Symbol; Digit Span was also a minus score for both groups. This pattern is very similar to that shown in Figure 2, and Estes states that such observed subtest differences, as well as a higher verbal than performance IQ, are on the average to be expected in superior well-adjusted adults. As the general intelligence level of the homosexual group, as well as the Vocabulary scores, are significantly higher than those of the control group (see Table XXI), it therefore follows that the more superior homosexual group would have a greater mean Negative Performance Scatter.

(2) In most psychoneuroses, the general finding is that impairment of functioning is greater in the performance than in the verbal sphere[3], the performance results being particularly affected by depression and anxiety. According to Rapaport[4], a generalised lowering of the performance scores below the Vocabulary score is most directly related to the presence of depressive trends. Although the mean Negative Performance Scatter of the homosexual group is still well within the bounds of normality, and does not approach the psychoneurotic depressive pattern, it may indicate a possible trend towards mild anxiety.

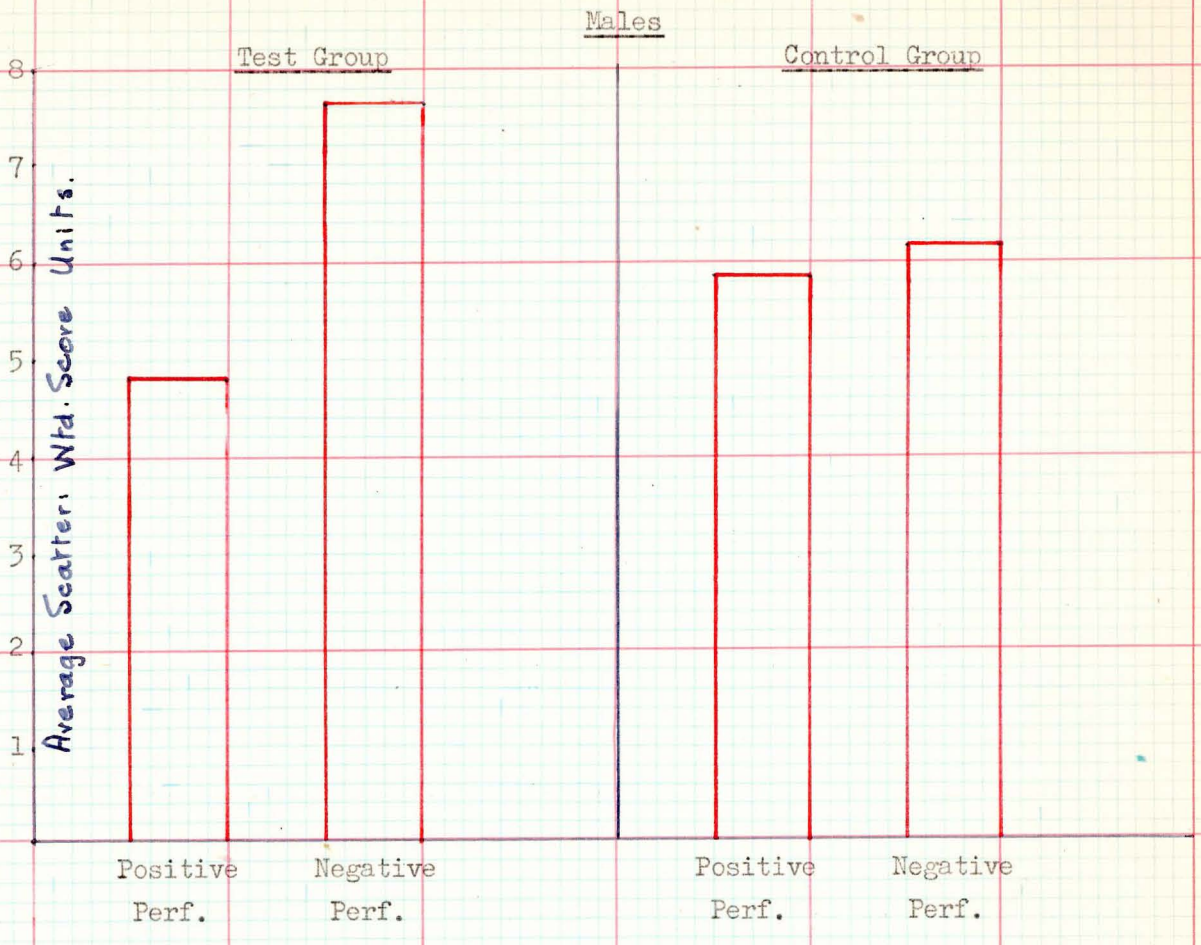
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[1] Wechsler, 1944, Op. Cit., p. 147.

[2] Stanley G. Estes, Deviations of Wechsler-Bellevue Subtest Scores from Vocabulary Level in Superior Adults, J. Abn. Soc. Psychol., 41:2, Apr. 1946, 226 - 228.

[3] Wechsler, Ibid, p. 147.

[4] Rapaport, Op. Cit., p. 61.


Males
Test Group
Control Group
Average Scatter: Wtd. Score Units.
8
7
6
5
4
3
2
1
Positive Perf.
Negative Perf.
Positive Perf.
Negative Perf.

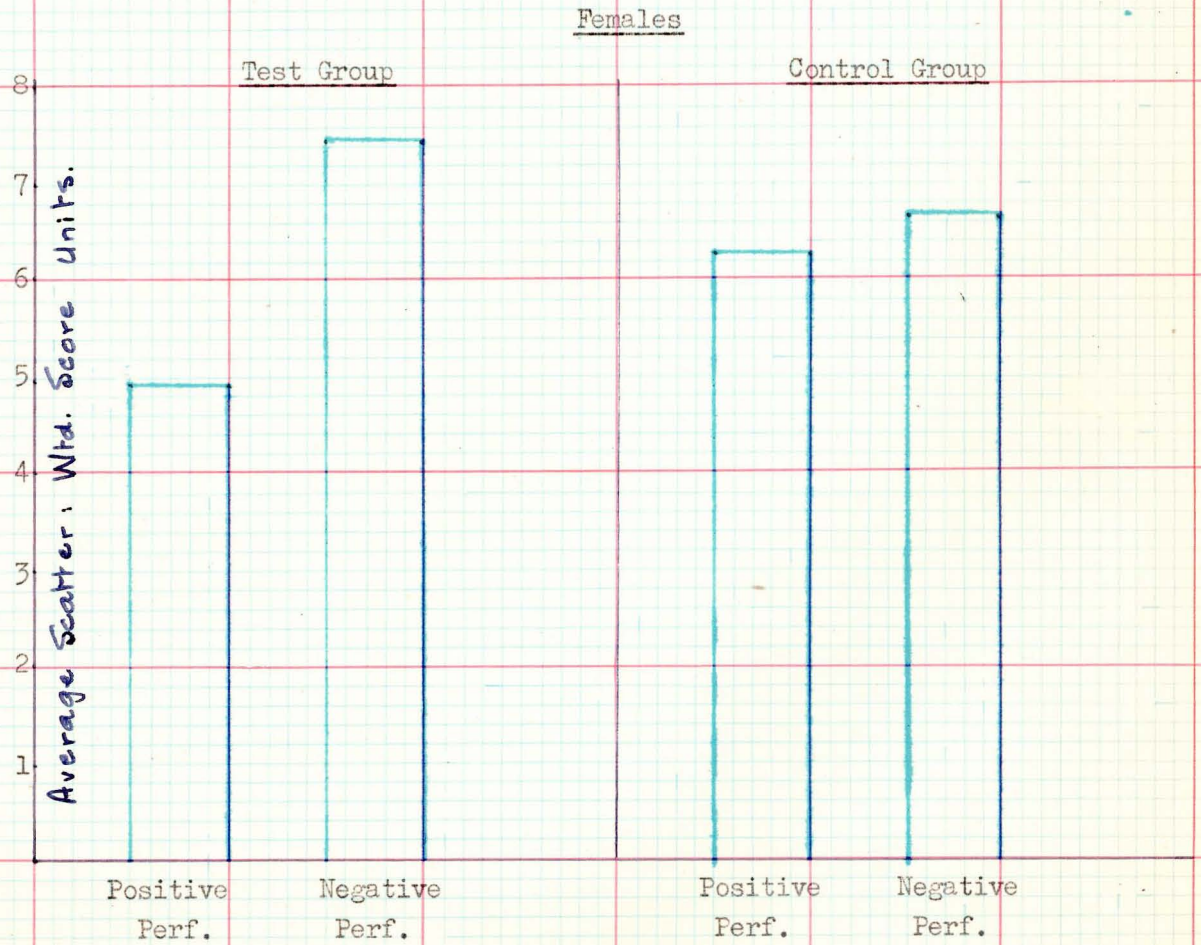

Females
Test Group
Control Group
Average Scatter: Wtd. Score Units.
8
7
6
5
4
3
2
1
Positive Perf.
Negative Perf.
Positive Perf.
Negative Perf.

Figure 3

Since the mean Negative Performance Scatter pattern of the homosexual group is not sufficiently pronounced to warrant a group diagnosis of neurosis, the first explanation given previously seems to be the more reasonable interpretation of this finding, unless further signs of anxiety emerge from the more detailed analyses which follow to give support to the second possible explanation.

Great Negative Vocabulary Scatter.

Extremely low weighted scores may be found on individual scattergrams in normal as well as clinical cases, and these are called "great negative Vocabulary scatters." Most clinical groups show a high percentage of individual cases with such great negative Vocabulary scatter, whereas groups of normal people only sporadically have cases of this sort. Single extreme inadequacy of a function underlying a particular subtest performance may be a developmental anomaly or an expression of limited background, but extreme disparity may be an indicator of pathology.

The limits set for great negative Vocabulary scatter are as follows:

| | | | |
|---|---|---|---|
| Information | $\leq$ -3 | Picture Completion | $\leq$ -4 |
| Comprehension | $\leq$ -3 | Picture Arrangement | $\leq$ -4 |
| Similarities | $\leq$ -3 | Digit Symbol | $\leq$ -4 |
| Block Design | $\leq$ -3 | Object Assembly | $\leq$ -5 |

Rapaport found the group with the largest percentage of cases having two or less extreme drops from Vocabulary level to be his Patrol group, and the smallest percentage of cases with such drops in the Depressive psychoses. Table XXII shows the percentage of cases in the present survey having two or less extreme drops, and 3 - 5 such drops. For comparative purposes, Rapaport's Neurotics, as subdivided by him, and Patrol groups are also included.

Table XXII overleaf shows that the males in this survey have a smaller percentage of subjects with great negative Vocabulary scatter than any of Rapaport's groups, including his non-depressive Patrol group of 38 cases. The females are on a par with Rapaport's mixed neurosis group, which, however, contained only 9 cases; but the numbers do not approach either his Depressive Patrol (16 cases) or his Anxiety and Depression (10 cases) groups. It would appear from this table, therefore, that the male homosexuals show no group tendency to neurosis or, in particular, to anxiety. The homosexual women as a group are no more neurotic than the heterosexual women in this survey, but the women on the whole may have a greater tendency than the men to mild neurosis of both hysterical or phobic and obsessive type. This would be a sex difference if any, and not related specifically to the homosexual women.

Guilford and Martin[1] found 400 high school girls to be more inclined than boys to fluctuations of mood and to be depressed. They describe depression here as an "inclination toward unpleasant moods, feelings of unworthiness and guilt" as opposed to cheerfulness and optimism. In a rural sample, they found the female group at all age levels between 15 and 50 to be "slightly more shy, more depressed and more cycloid."

Great Negative Vocabulary Scatter:

Percentage of Cases.

| Group | No. of Cases | Percentage of Cases | | | |
|---|---|---|---|---|---|
| | | $\leq 2$ | 3 - 5 | $>5$ | Total $\geq 3$ |
| Rapaport's Neurotics. | | | | | |
| Total Neurotics | 59 | 75 | 20 | 5 | 25 |
| Hysteria | 18 | 84 | 10 | 6 | 16 |
| Anxiety and Depression | 10 | 70 | 30 | 0 | 30 |
| Mixed Neurosis | 9 | 89 | 11 | 0 | 11 |
| Obsessive-Compulsive | 16 | 62 | 25 | 12 | 37 |
| Neurasthenia | 6 | 67 | 33 | 0 | 33 |
| Rapaport's Patrol Group. | | | | | |
| Depressive | 16 | 81 | 6 | 12 | 18 |
| Non-Depressive | 38 | 92 | 8 | 0 | 8 |
| Present Survey. | | | | | |
| Male : Test Group | 50 | 94 | 6 | 0 | 6 |
| Control Group | 50 | 94 | 6 | 0 | 6 |
| Female : Test Group | 50 | 90 | 10 | 0 | 10 |
| Control Group | 50 | 88 | 12 | 0 | 12 |
| Total : Test Group | 100 | 92 | 8 | 0 | 8 |
| Control Group | 100 | 91 | 9 | 0 | 9 |

TABLE XXII.

It will be noted that when the males and females are added together in the present test and control groups, the percentage of cases with great negative Vocabulary scatter is 8% and 9% respectively, which is lower than any of Rapaport's clinical groups, all of which also contain both males and females. This finding bears out Jastak's contention[2] that sex differences may distort interpretation of scatter, and also lends support to the argument previously brought up[3] that the high Negative Performance Scatter of the homosexual males is more likely to be due to their higher intelligence rating than to the presence of anxiety.

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[1] Guilford and Martin, Op. Cit., p. 221.

[2] Jastak, Op. Cit., p. 192.

[3] See pp. 160 - 162.

Group Scatter Patterns.

It must be borne in mind that while group scatter patterns show group trends, there are always individual deviations within the group. This applies to a clinical as well as a normal population. The present homosexual group of subjects will not be expected to show any very great scatter, such as would be found in any institutionalised psychotic group, but the scatter may indicate some general trend towards a particular type of adjustment as compared with the control group of subjects taken from the normal population.

Group Vocabulary scattergrams are shown in Figure 2. These represent the average Vocabulary scatter of all the individuals in the group on each of the subtests, the Vocabulary level being represented by the horizontal axis at 0. (See page 159.) From this it will be seen that no subtest mean for any group deviates from the Vocabulary level by as much as three weighted score units, i.e. no deviation is outside the limits of a normal population scattergram. The three primarily verbal subtests are above Vocabulary level for all groups except the homosexual females, whose Information scatter is slightly negative. The five performance subtests cluster around Vocabulary level, two having a plus, and three a minus, deviation; the homosexual female group is again the only one which shows only one performance subtest (Picture Completion) with a definite positive deviation, the other four being below or equal to Vocabulary level. A general lowering of performance subtests below Vocabulary and verbal level is an indication of the presence of anxiety, and this is emphasised when both Arithmetic and Digit Span are equally low, which may be seen to be the case in the female test group.

The main additional group differences which are clearly apparent in Figure 2 are as follows:

(1) Males of both groups have a greater positive Vocabulary scatter than females of either group on Information, Arithmetic and Block Design; females of both groups have a greater positive Vocabulary scatter on Similarities, and a smaller negative Vocabulary scatter on Digit Symbol than the males of either group. These would appear to be sex differences unrelated to homosexuality,

(2) The test group, both males and females, have a greater negative Vocabulary scatter than either of the control groups on Object Assembly. Their low score on this subtest in relation to Vocabulary as well as to all other subtests, is strikingly clear in Figure 2. Great drops in this test below Vocabulary level are found in Anxiety and Depression and allied Neurasthenic groups, and also in schizoid normals.

(3) The female test group has a negative Vocabulary scatter greater than any other group on Arithmetic and Digit Span, performance on both these tests

being impaired by the presence of anxiety, and particularly neurotic anxiety. This group is also the only one to have a negative scatter for Information; a generally well-retained verbal level which emphasises a comparatively poor Information score, is found in Hysterics who are characterised by anxiety. In addition, this is the only group which has not a clear positive Vocabulary scatter on Block Design, a subtest which is adversely affected by the presence of anxiety and/or depression. This group has the greatest positive scatter for Co mprehension, a pattern usually found among neurotics, and the least negative scatter for Digit Symbol, which is typical of anxious normals. This pattern emerges very clearly.

(4) The male test group has the greatest negative Vocabulary scatter of all groups on Picture Arrangement, a pattern typical of the "intellectualising" and schizoid groups, and on Object Assembly; also, by a small margin, the greatest positive Vocabulary scatter on Arithmetic, a subtest on which the "intellectualising" groups and schizoid normals tend to do better than non-schizoid normals.

(5) Compared with Vocabulary level, the female control group has the best score of all groups on Object Assembly.

(6) The greatest negative Vocabulary scatter on Digit Symbol was attained by the male control group, who also had the highest relative score on Information, Digit Span, Picture Arrangement and, by a very small margin, Block Design.

A comparison of inter-test scores for the four groups under consideration (see Appendix A) shows the following results:

(1) Comprehension significantly greater at .01 than both Information and Vocabulary : indicative of anxiety, or of hysteria which has anxiety as a factor, and found only in the results of the female test group.

(2) Similarities significantly greater than all other subtests means as well as verbal mean : indicative of anxiety, and found in all groups but with the greatest significance ($t = 5.264$) in the female test group.

(3) Digit Span significantly lower than Vocabulary : indicative of anxiety and found, at .01 level, only in the female test group.

(4) Object Assembly significantly lower than Vocabulary and modified performance mean, and also lower than total mean : indicative of anxiety, depression and/or neurasthenia as well as a schizoid normal adjustment, and found amongst both test groups and, less significantly, among the male control group.

(5) Block Design significantly above both Vocabulary and modified

Performance mean : schizoid normal pattern and found, at .01 level, in both male groups, the score of the test group males being significantly higher than that of any other group.

(6) The only group which does not follow this pattern on Block Design is the female test group, whose relatively low score on this subtest gives supporting indication of anxiety.

(7) Digit Symbol relatively high in comparison to both Vocabulary and modified Performance mean : anxious but still-adjusted individuals are able to apply the pressure of concentration which, though perhaps excessive, results in better achievement on both the Digit Symbol and Picture Completion subtests. The present female test group is the only group with a high Picture Completion score which does not show a Digit Symbol score significantly below Vocabulary and not differing significantly from the modified Performance mean. Taken in conjunction with the preceding paragraph, this assumes some importance as support for the other symptoms of anxiety.

(8) Picture Arrangement significantly below Vocabulary : pattern of schizoid normals and the "intellectualising" groups and found only in the male test group.

(9) Arithmetic significantly above Vocabulary : pattern of schizoid normals and the "intellectualising" groups and found only in the male test group.

Summary.

(1) Scattergrams of both mean weighted scores and mean Vocabulary scatter indicate the presence of anxiety in the group of 50 female homosexual subjects who took part in this survey. In addition to significant intertest differences, other signs emerged to give further support to these findings, which did not appear in the scattergrams of any other group. Particular quantitative signs of anxiety in this group are:

(a) Great negative Vocabulary scatter and extremely low score on Object Assembly, Arithmetic and Digit Span.

(b) Comprehension significantly greater than Information and Vocabulary.

(c) Similarities significantly greater than all other subtest means as well as verbal mean.

(d) Digit Span significantly lower than Vocabulary,

(e) Object Assembly significantly lower than Vocabulary and modified

Performance mean, and lower than total mean.

(f) Supporting signs: (i) relatively low Block Design score;
(ii) relatively low Information score; and
(iii) relatively high Digit Symbol score.

(2) The 50 male homosexual subjects who took part in this survey appear to follow the pattern of the "intellectualising" groups, i.e. Paranoid Conditions, Over-Ideational Preschizophrenics and Obsessive-Compulsives, or of the very similar schizoid normals. This is borne out by the following quantitative signs:

(a) Extremely low Object Assembly score, with great negative Vocabulary scatter.

(b) Great negative Vocabulary scatter on Picture Arrangement.

(c) Significantly high Block Design score, also significantly greater than Vocabulary and modified Performance mean.

(d) Picture Arrangement significantly lower than Vocabulary.

(e) Arithmetic significantly greater than Vocabulary.

(f) Supporting sign: relatively low Digit Symbol score.

(3) The mean scattergrams for the control groups showed no significant patterns.

(4) The scattergrams of the homosexual groups show types of adjustment rather than patterns of maladjustment since the differences between subtest scores, although statistically significant, are still within normal limits. The differences are relative to the scores of the other groups and to the other subtests within the group, rather than absolute differences. As these relative differences are still within the range of normality, it may be said only that the group of female homosexuals shows a mild trend towards anxiety neurosis, and that the male homosexuals tend towards an "intellectualising" or schizoid adjustment.

(5) The generalised drop of performance mean below verbal mean contra-indicates any suggestion of a psychopathic personality among the homosexual groups. The further typical psychopathic patterns of (a) low Similarities, Arithmetic and Information, together with frequently high Picture Arrangement score, and (b) the sum of Picture Arrangement plus Object Assembly greater than the sum of Block Design plus Picture Completion, not only fail to appear in either of the test groups but rather are reversed, the results being clearly shown in Figure 2 (page 159) and Figure 4 (page 169). This survey, therefore, offers no support whatsoever for the theory that the homosexual

should be classified as a psychopathic personality. In those psychopathic homosexuals who have been studied in penal institutions, the homosexuality is more likely to be a product of, or incidental to, the psychopathic personality, just as heterosexual offences may be a similar adjunct to such a personality. Whereas psychopaths may include sex offences in their anti-social or amoral way of life, not all sex offenders are psychopaths; this applies particularly to the group of homosexuals who took part in this survey, and whose results on the Wechsler-Bellevue test so emphatically negate the theory that homosexuals should be classified under the heading of psychopathic personality.

Individual Variations from Group Scatter Patterns.

Rapaport[1] believes that "Every 'normal' man contains within himself, to a greater or lesser degree, trends toward the various clinical maladjustments... Mild manifestations of maladjustment in normals express themselves in test performances by indicators similar to those seen in pathological cases. One must go beyond asking, What do normals do on this test? One must also ask, What does this type of normal and that type of normal do on this test?" The present control group is a heterogeneous collection of normal (non-clinical) individuals drawn from the general population. Equally, the test group is a collection of non-clinical cases drawn from the general population, but with the factor of homosexuality in common. Neither group, therefore, can be expected to show symptoms of psychosis. It has been shown, however, that indications of neurotic symptoms, or of maladjustment, or of a particular type of adjustment within a group, may be shown up by the Wechsler-Bellevue scattergrams. Individual variations from the group scatter patterns must, of course, also occur, and item analyses of the various subtests were therefore carried out[2] to see (a) whether there were any particular items on which failure was characteristic for either group, and if so how these might be interpreted; and (b) whether individuals within any group should show any particular type of failure or pattern of adjustment.

The mean weighted score for each subtest for each group is shown in Figure 4 overleaf. It will be seen that no subtest score exceeds ±3 from the group's mean for all subtests; this is as expected with any non-clinical group.

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[1] Rapaport, Op. Cit., p. 30.

[2] The items, arranged in order of difficulty for each of the verbal subtests, are shown in Appendix B.

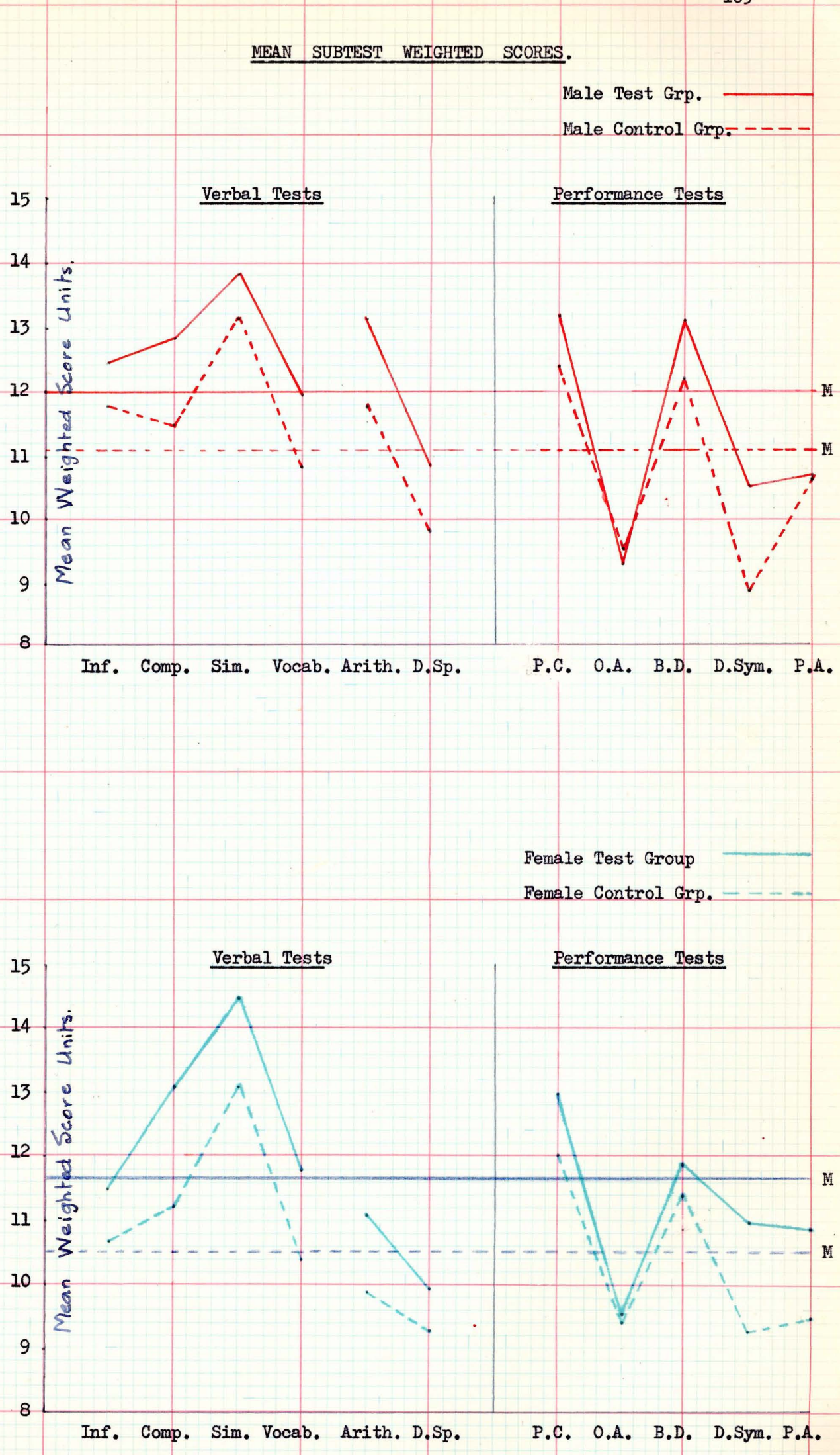

MEAN SUBTEST WEIGHTED SCORES.
Male Test Grp.
Male Control Grp.
Verbal Tests
Performance Tests
Mean Weighted Score Units.
15
14
13
12
11
10
9
8
M
M
Inf. Comp. Sim. Vocab. Arith. D.Sp.
P.C. O.A. B.D. D.Sym. P.A.
Female Test Group
Female Control Grp.
Verbal Tests
Performance Tests
Mean Weighted Score Units.
15
14
13
12
11
10
9
8
M
M
Inf. Comp. Sim. Vocab. Arith. D.Sp.
P.C. O.A. B.D. D.Sym. P.A.

Figure 4.

Vocabulary.

For each word in this subtest, criteria are laid down to allow for the scoring of definitions at 2-point, 1-point or 0-point levels; these criteria are strictly adhered to during the standardisation process, but from the number of half-scores obtained it appears that some of the criteria may be on too high a level, and may therefore be lowered when the test is in its final form. An example of one such word is No. 4, "diamond". To gain full score of two points, the definition must cover three qualities, (a) mineral origin, (b) hardness, and (c) either carbonic origin or value or any other sufficiently narrow qualification. Although very few subjects fail this item, 27 women and 13 men of the control group, and 18 women and 13 men of the test group, only scored at the 1-point level.

As the differentiation between 2-point and 1-point answers may be made less strict when the results of the standardisation population are eventually analysed, for the purpose of this survey only outright failures are considered.

The final order of difficulty of the 42 words has also still to be established; hence the basis for comparison of the present two groups was taken from the data supplied by the normal control group.

Theoretically, the first part of the test (21 words) should not contain failures, as the words to be defined are considered simple, every day words which any person might be expected to have picked up in his daily life. In fact, the 42 words have been divided into four groups of ascending order of difficulty, and containing 12, 9, 9 and 12 words respectively. Words of the first degree of difficulty contained only 2% failures by the control group; on words of second degree difficulty there were 12.8% failures by the control group; on words of third degree difficulty, 31.5% failures; and on fourth degree of difficulty, 72.8% failures.

In the first group of words, neurotic and normal subjects are not expected to have more than one sporadic miss which might be explainable as a "temporary inefficiency" or a result of poor education or environment. This was found to be the case among the present subjects, only two subjects, both from the female control group and both with a poor educational background, failing 3 and 5 of these words respectively.

In the words of second degree difficulty, more than two failures by any one subject may be an indication of depression, a neurasthenic condition, or a precarious adjustment with little cultural support for vocabulary achievement. The present control group shows 8 women and 4 men with three or more such misses, whereas only one male subject in the test group has three such

failures. Of the control group, 6 of these women and 2 of the men have a low standard of education, but the homosexuals with the same standard of education did not fail these words. The homosexuals as a group, therefore, have fewer subjects than the control group who show this sign of precarious adjustment.

It is interesting to note here that the word hara-kiri was failed by 22 of the female subjects and only 6 of the male subjects; cedar was failed by 24 male subjects and 12 female subjects; and recede and secluded by an equal number of male and female subjects in the control group (10 and 7 respectively), while the total failures on these two words by the entire test group was only 10 subjects. Hara-kiri and cedar may therefore have a sex bias, whereas recede and secluded may have more significance for homosexuals than for the control group.

In a normal population sample, many misses on the items of third degree of difficulty are most likely to reflect the effect of slight maladjustment on the Vocabulary efficiency of individuals with a poor education al and environmental background, in which case items of fourth degree of difficulty are likely to be failed as well. An excellent performance on these items occurs in well adjusted and highly intelligent people, or in subjects characterised by a very strong striving towards "intellectualising", such as obsessive-compulsive and over-ideational types, and paranoid conditions.

In the present control group, 17 females and 14 males, or 31% of the total group, had more than three failures on these Vocabulary items; of these, 14 females and 7 males had not progressed beyond a standard eight education, so that this result is probably a fair reflection of their educational standard. As the test and control groups are matched for educational standard, similar results might be expected from the test group, instead of which we find that more than three failures were scored by only 9 females 5 with a standard eight education or lower) and 8 males (3 with a standard six or seven education), i.e. by 17% of the total group. The remaining 83% of the test group therefore may be either well adjusted and highly intelligent, or inclined towards "intellectualising". A previous section (see pages 152 forward) shows the test group to have a higher mean IQ than the control group; scattergrams (see pages 155 forward) have shown a schizoid trend, which has some obsessive-compulsive features, to be present in the males of the test group.

Sex bias in favour of the males seems clear in three of the words occurring in the third degree of difficulty group. These are armoury, nitroglycerine and ballast, which were failed by 44, 38 and 48 females and by only 14, 12 and 23 males respectively. The three words in this section which

provided more failures for the control than the test group were espionage with 22 misses, affliction with 24, and pewter with 27, as compared with 12, 5 and 13 misses respectively in the test group. This result for the word "affliction" particularly, is not difficult to understand.

To pass the final 12 words of the Vocabulary test requires usually special cultural predilection, special schooling, and experiential stimulation, and this section is useful only with reference to the cultural level of the subject. Cultural levels being equal, the lowest percentage of misses in this section is found in Over-Ideational and Obsessive-Compulsive groups. Diagnostically, three or four passes in this section are only significant if there have been a large number of misses in the less difficult sections of the test. This occurred in 3 female and 3 male test group cases, and in 4 female and 2 male control group cases.

The generally higher Vocabulary level of the more intelligent test group is borne out by the number of passes on the 12 items of fourth degree of difficulty, as shown in Table XXIII. On the whole, the women in both the control and test groups did better than the men on this section of the Vocabulary test.

Vocabulary Subtest :
Items of Fourth Degree Difficulty.

| | Test Group | Control Group |
|---|---|---|
| Percentage of passes | 34.3% | 25.6% |
| Number of subjects who passed 6 or more items | 27 | 18 |
| Number of subjects who failed all items | 10 | 21 |

TABLE XXIII

The most frequently passed words for both groups were vesper, catacomb and chattel. 57 of the women passed the word spangle, and 30 of the test group males passed this word as against 10 of the control males; this might be attributed to the interest of homosexual males in theatre costumes and/or feminine clothes. The women also scored much higher (61 passes as against 31 and 18 for the test and control males respectively) on the word vesper which has a religious or "feminine" connotation.

Extreme weighted scores in this test are considered to be 15 or higher, and 5 or lower. Although all Vocabulary scores are influenced by cultural factors, extremely high weighted scores are most characteristic of

groups given to intellectualising, or to compulsive defence mechanisms, or to well-adjusted, highly intelligent groups. In the present group, it appears that in the 9 test and 4 control subjects who obtained weighted scores of 15 to 17 for Vocabulary, the reason in the majority of cases is to be found in the general high level of attainment on the entire Wechsler-Bellevue Scale rather than in mere "intellectualisation". Of the 9 test group subjects with extremely high weighted scores, 7 had IQs of 131 or higher, and two of the control subjects had IQs of 131 and 134; included in these numbers are two journalists (test subject and control) who would in addition to a high IQ show special knowledge of and skill with vocabulary.

From the Vocabulary subtest item analysis, some conclusions may be drawn regarding the 200 subjects of the present survey.

(1) A few words seem to have a sex bias, such as armoury, nitroglycerine, ballast and hara-kiri which favour the males, and vesper and spangle which favour the females and the homosexual males.

(2) The words recede, secluded, affliction, espionage and pewter were much more frequently passed by the homosexual than the control group. The first three words especially may have a particular significance for this group of subjects.

(3) There were more passes among the homosexual than the control group of words at all four degrees of difficulty, as is shown in Table XXIV.

Vocabulary Failures.

| Degree of Difficulty | No. of cases with | Control Group | | | Test Group | | |
|---|---|---|---|---|---|---|---|
| | | Male | Female | Total | Male | Female | Total |
| 1st | 2 misses | 0 | 2 | 2 | 0 | 0 | 0 |
| 2nd | 2 " | 5 | 8 | 13 | 1 | 0 | 1 |
| 3rd | 3 " | 14 | 17 | 31 | 8 | 9 | 17 |
| 4th | 6 " | 44 | 38 | 82 | 39 | 34 | 78 |

TABLE XXIV.

(4) More homosexual than control subjects had extremely high weighted scores of 15 or more.

(5) The generally higher Vocabulary standard of the homosexual group is most likely to be a function of the higher IQs obtained by them.

(6) In those cases where this analysis shows possible indications of obsessive-compulsive or over-ideational features, support for these will be

sought in individual qualitative analyses of the answer books, and discussed in a later section.

(7) As a group, the homosexuals evince no neurotic trend that can be deduced from their performance on this subtest.

Information.

Rapaport says[1] that intelligence should be looked upon as "a function of a natural endowment unfolding in a process of maturation, in the course of which, if the functioning of the individual is unhampered, it will undergo a process of 'picking up' information of facts and knowledge of relationships from its 'educational environment'; this process will depend upon the poverty or wealth of the 'educational environment', which includes the home, the relatives, their social relationships, and the geographical-cultural location and its implications." The educational environment yields in part, sooner or later, to schooling which may or may not be followed by special "cultural predilections to complement all that schooling and educational environment have accomplished."

Broken or unhappy early homes may influence the opportunities a child has for 'picking up' information, but later influences such as ambition, introduction into more cultural social circles, or expansion of interests, may enable a person to acquire information at a later stage. In the group of homosexuals studied here, 60% were from disrupted or unhappy homes which might have impeded their early acquisition of factual information. On the other hand, homosexuals are frequently introduced as protégés into circles which are socially or culturally superior to their home environment and from which they are able to learn a great deal; in these cases, ambition, a widening of interests, and a desire either to please or emulate a benefactor, all play a part in the 'picking up' of factual knowledge which may for some reason have been hampered at an earlier stage. Of the 60 subjects from broken or unhappy early homes, only one man and one woman, with a standard 6 and a standard 7 education, had Information weighted scores that were 4.4 and 2.8 points respectively below their total mean score for the 10 Wechsler-Bellevue subtests. 93.3% of those subjects from disrupted homes had an Information score within $\pm$1.5 of their total mean score, so that if broken homes have an adverse influence on the early acquisition of general knowledge, as Inman found[2], this early setback appears to be overcome at a later age.

Failures on any of the 25 items in the Information subtest may be due to (a) poor educational environment, or (b) temporary inefficiency, such

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[1] Rapaport, Op. Cit., p. 129.

[2] Inman, Op. Cit. See p. 138.

as "forgetting" or repression due to association of ideas as elucidated by Freud[1], or to the presence of anxiety. Such failures in the normal population, however, are usually spot-like, and an analysis of the items in this test shows a gradual increase in degree of difficulty for both groups of subjects.

On the basis of results achieved by the control group, the 25 items have been divided into three degrees of difficulty. The first or "easy" items contained 5.7% failures by the control group, the "intermediate" items 33.1% failures, and the third or "difficult" items 76% failures. The comparable failures among the homosexual subjects were 3.5%, 19.2% and 62.5% for these three groups of items.

Of all neurotic groups, Hysterics and Neurasthenics are the most likely to fail more than two of the easy items, where such misses are followed by passes on the more difficult items and are not due to poor educational environment. Such failures occurred in four cases, all females, two being in the control group. Neurasthenic cases tend to show widespread impairment in all verbal tests at all levels of difficulty, whereas in cases of hysteria this impaired efficiency for either accumulating information or for having it readily available may be related to repression, which is a clinically outstanding feature of this group. Where the Information score is lower than both the Vocabulary score and verbal mean, the tendency to hysteria is emphasised; this pattern is pronounced in three of these four female cases.

Apart from intelligent and well-adjusted normal subjects, extremely high weighted scores are most characteristic of the "intellectualising" group who, in pronounced cases, keep a tenuous hold on reality by means of intellectual pursuits, information and rationalisation. Such high weighted scores of 15 or 16 occur in 10 control and 12 test group subjects, of whom all but 4 and 3 respectively fall into the very superior intelligence category. The six control and two test group subjects who had extremely low weighted scores of 5 or 6 all had a poor educational background (standard 6 or 7 only), and IQs ranging from 92 to 107.

The suggestion that sex interests might influence the results on certain of the Information questions is not borne out by further investigation. Of the 10 questions which might be biassed in favour of the males, there were 26.2% failures amongst the males and 33.3% failures amongst the females; of the 8 questions which might be of greater interest to females, the men again had fewer failures, viz. 39.1% as compared with 43.9% failures amongst the females. It seems, therefore, that the lower Information scores achieved by

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[1] Sigmund Freud, Psychopathology of Everyday Life, London, Ernest Benn Ltd., 1948.

the females in this survey is a general rather than a specific lack of acquired knowledge.

Indications from this subtest analysis, therefore, are that three female subjects show a trend toward an hysteriform maladjustment, whilst three test and four control subjects show "intellectualising" symptoms which are valid as clues to personality only if supported by other indications, and particularly by qualitative analyses.

Comprehension.

The 10 questions in the Comprehension subtest were divided into two groups, the first of which may be considered "easy" items, and the breakdown was based on the responses of the control subjects among whom there were 5.3% failures; in the test group there were 3.5% failures. In the second and more difficult set of questions, there were 15.7% failures among the control group and 6.3% among the test group.

Failure on one or several of the easy items may be considered an indication of impaired judgment which, in a normal population sample is considered as merely "temporary inefficiency" and not a general impairment. If the failure is due to low level of intelligence, the subject should also fail to score on the more difficult items. A group of normal subjects, such as the present control group, should not contain many outright failures on these easy items; there were in fact only 3 men and 4 women who failed two questions each, and none of the test group failed more than one question.

Although failure on the more difficult set of questions raises the possibility of the presence of impaired judgment, it may also be due in some cases to limited knowledge in a subject with a poor educational or social setting. None of the test group failed more than two questions in this section of the subtest, whereas of the control group there were two men and six women with three or four failures each. In order to evaluate these failures in the control group, Comprehension scores should be compared with Information and Vocabulary. In neurotic groups, a Comprehension score higher than both Information and Vocabulary is found among the hysteria and anxiety-depression groups, and it occurs in one of the above female results; a drop in Comprehension score below Information and Vocabulary is more likely to indicate that one's knowledge is not being effectively used in dealing with reality problems, and that judgment is impaired. This pattern amongst Neurotics is characteristic of Obsessive-Compulsive neuroses and Neurasthenia, and occurs in two male and two female cases. Without further support from other signs, however, these cases should not be labelled "neurotic".

There is only one extremely low weighted score in this subtest, and that is for one of the control females. Such a low score may indicate the presence of a neurosis or extreme depression. Extremely high scores are seldom found in psychotic groups, particularly schizophrenics and psychotic depressives. Approximately 25% of neurotic and normal cases may be expected to have weighted scores of 14 or more. In the present survey, 40 homosexual and 17 control subjects have weighted scores of 14 or more, 20 and 5 subjects respectively having 15 or more. Groups of precariously adjusted or maladjusted subjects seldom show weighted scores of 16 or over; only four of the control group achieve such scores, whereas nine of the homosexual group do so.

On the Comprehension subtest, therefore, there are fewer individual cases among the test group than among the controls who show neurotic characteristics; but if a comparison is made between the mean group scores for Comprehension and the mean group scores for both Information and Vocabulary, the first sign of any group deviation from a common pattern becomes apparent.

Appendix A shows the significance of the differences between the means of all subtests for both the test and control groups, each subdivided into males and females. For the control group, males and females, there is no significant difference between the mean scores for these three subtests. The test group males show a difference, significant at .02, between Comprehension and Vocabulary only. The group of female homosexuals is the only one in which Comprehension is higher, at the .01 level, than both Information and Vocabulary, a pattern which is found among the hysteria and anxiety-depression groups, both of which have anxiety as a common factor. In fact, Comprehension for this group is significantly higher, at the same level, than every other subtest with the exception of the comparatively easy Picture Completion, and this result in itself may be taken as a neurotic indication, indicative of the presence of anxiety, and has been commented on previously. (See page 166.

Similarities.

Successful performance on the Similarities subtest implies verbal concept formation. Of all the subtests, Similarities had the highest mean weighted score for men and women in both the control and test groups in this survey. Vocabulary scatter was positive for all four groups.

According to the results of the control group, the items were divided into three degrees of difficulty, with 2.6%, 13.5% and 43.7% failures respectively. The failures in the test group were 0.8%, 10% and 29% respectively in each of these groups of items. Two females in the control group were the only subjects to fail more than one of the easy items; in clinical

cases, this is indicative of neurotic depression. Misses in the second degree of difficulty are most likely amongst neurotics to be in the neurasthenic group; more than two misses occurred in the control group in one male and four female cases, and in one female homosexual case. Cultural weakness often shows up in misses on the last and most difficult three items; failures in this section are of more importance in psychotic than in neurotic or normal groups.

Extremely high weighted scores are most likely to occur in neurotics who have a good cultural background, in "intellectualising" cases and in well-adjusted normal subjects. In the present groups, weighted scores of 15 or over occurred in 33 control and 43 test cases; three of the homosexual women and one control male achieved the maximum score of 18, their IQs ranging from 127 to 134, but weighted scores of 17 were also achieved by three test and two control cases whose IQs ranged from 112 to 117.

The number of high weighted individual scores is in keeping with the high group scores, but the highest group mean appears in the homosexual females. Their Similarities score is significantly higher, at $< .009$ level, than the control females; it is also significantly higher, at the .01 level, than any of their other ten subtests, a result which is most nearly achieved by the control females, whose Similarities score is also significantly higher than the remaining subtest scores, but in one case (Picture Completion) only at the 3% level. This pattern is characteristic for neurotic depressives, mixed neurotics (i.e. having hysterical, or phobic, as well as obsessive features), and the anxiety and depression groups. Therefore this relatively high score on Similarities appears to be a sex characteristic, supporting the tendency mentioned before[1] that women are more inclined than men to mild neurosis of both hysterical or phobic and obsessive type. The significantly higher score of the homosexual women does not detract from this finding, but rather emphasises the presence of anxiety and doubt in this group.

From the four primarily verbal subtests so far discussed, viz. Vocabulary, Information, Comprehension and Similarities, the following points emerge:-

(1) The Vocabulary score, which is taken as the hypothetical intelligence level, is within four points of each group's mean for the combined subtests. Thus the hypothetical intelligence level and the mean level of actual performance are very nearly identical, indicating no impairment in verbal functioning for any group.

(2) The highest score for all four groups was achieved in the Similarities

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[1] See page 162.

subtest.

(3) The only group pattern to emerge was for the homosexual females; this pattern, which gives justifiable grounds for concluding that anxiety is present to an unusual degree in this group of subjects, has been previously discussed[1].

Arithmetic and Digit Span.

In the section on rationale[2], Arithmetic has been considered a test of concentration, or voluntary effort, and Digit Span a test of attention or "free receptivity". In neurotic and normal, as well as depressive and even preschizophrenic groups, Digit Span score is poorer than Arithmetic, and Rapaport[3] gives as a possible explanation of this the fact that attention suffers first under the blows of anxiety, affect and overalent (emotionally overloaded) ideas, but that as long as concentration is relatively well-preserved the individual is able to replace the impaired free receptivity by voluntary effort, i.e. concentration.

In any control group selected from the normal population, it is inevitable that certain of the individuals are precariously adjusted, and some (as in the case of Rapaport's Patrol group) may show markedly schizoid characteristics. These schizoid normals show a shift towards a higher Digit Span than Arithmetic score, which in a more extreme form is characteristic of schizophrenic groups. Such a reversal of scores is referred to as an out-of-pattern relationship. This out-of-pattern tendency in schizoid normals may be shown in the keeping of both scores high and nearly equal, indicating a type of thinking which is manifested by both sharpened attention and sharpened concentration. In neurotics, the presence of anxiety pulls the Digit Span score far below the Arithmetic score.

Diagnostically, therefore, any extreme superiority of Digit Span over Arithmetic score may be taken as a schizoid or schizophrenic indication; approximate equality of scores on a level above the general level of the other weighted scores must also raise a suspicion of schizoid trends, particularly if the Arithmetic score is relatively unimpaired. On the basis of these patterns, schizoid trends in individual cases are shown in Table XXV. One of the two criteria, of out-of-pattern score, or of both test scores on a high level, indicating schizoid normals, is found in 10 control cases and only 6 test cases. These few individual out-of-pattern results do not show up in the group mean scores for Arithmetic and Digit Span, where the Arithmetic mean for males and females of both test and control groups is higher than the Digit

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[1] See p. 166. [2] See pp. 141 ff. [3] Rapaport, Op. Cit., p. 171.

Span mean, thus following the normal population pattern on the whole. (See Figure 4.)

Digit Span and Arithmetic Subtests : Schizoid Indications.

| | Control Group | | Test Group | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| D.Sp. ≧ 5 greater than Arith. (Out-of-oattern relationship; Arith. impaired.) | 3 | 5 | 0 | 3 |
| D.Sp. and Arith. significantly greater than subject's subtest mean | 2 | 0 | 3 | 0 |
| TOTAL | 10 | | 6 | |

TABLE XXV.

Digit Span.

Rapaport does not consider Digit Span to be a test of either memory in general or of "memory span" in particular, since the function of memory refers to logically meaningful and emotionally relevant material which has been assimilated and organised in the course of a retention period, and is brought into consciousness again as "remembering". The function of memory is more implicit in the Information subtest than in Digit Span, and there is frequently a gross discrepancy in individual cases between weighted scores on these two subtests, either of which may be many points higher than the other. In the present control group, for example, there are 12 cases in which the Information weighted score is from 6 to 10 points higher than Digit Span, and three cases in which the Information score is 6 to 7 points lower than Digit Span. (The homosexual cases with similar discrepancies are respectively 9 and 2.) Thus, although Digit Span may be very low, the memory function implied in Information remains intact in these cases, or vice versa, and therefore Digit Span does not appear to be primarily a test of memory.

The usual relationship between digits forward and digits backward is that the former is from 0 to 2 points higher. When digits backward is greater than digits forward, or digits forward greatly in excess of digits backward, maladjustment of some sort may be suspected. Such reversals or exaggerations of the usual pattern occasionally occur in normal subjects, the exaggerations in clinical cases being most likely to occur in depressive psychotics and schizophrenics. The usual pattern was shown in this survey by 72% of both groups. An exaggeration of the pattern, where digits forward was 5 points greater than digits backward, occurred in only one female control

case; and reversals of pattern, with digits backward 1 to 2 points greater than digits forward, occurred in 5 male and 1 female (6%) control cases, and 5 male and 8 female (13%) test cases. These files will be analysed for further signs of maladjustment.

Impairment in the Digit Span subtest, unlike impairment in the subtests previously discussed, does not necessarily indicate depth of maladjustment but refers rather to a disturbing factor which may be present in any kind of clinical or normal case. That is, the impairment of attention refers first of all to anxiety, and the fact that Digit Span has a negative Vocabulary scatter and a low mean score for all four groups here discussed, merely emphasises how much anxiety and attention disturbance there may be even in a normal population. "Normality" here implies adjustment to an individual's own problems rather than meeting an absolute "norm". Even in his normal Patrol group, Rapaport found direct evidence that when anxiety is present, the score on Digit Span drops; although anxiety is not the only factor impairing Digit Span, it appears to be the major factor.

Extreme weighted scores in Digit Span are considered to be 4 or more points below and 2 or more points above Vocabulary level. Drops in Digit Span score occur in anxious normal subjects, and great drops in neurotics and depressives; great positive Vocabulary scatter usually indicates the presence of schizoid features.

Among neurotics, intense anxiety is chiefly characteristic of hysteria, and such cases would show extremely low weighted scores of 6 or less, whilst in a normal group extremely high scores of 15 or more are most commonly found in the "rationalising" subjects, i.e. over-ideational preschizophrenia and paranoid conditions.

The number of individuals in both groups who show these deviations from the group scatter patterns is shown in Table XXVI, from which it will be seen that, by these criteria, the homosexual group show fewer anxiety, hysteria and "rationalising" subjects than the control group taken from the normal population.

If a drop in Digit Span score is indicative of the presence of anxiety, then Figure 4 shows that anxiety is present in the normal group as well as in the homosexual group considered here.

Digit Span Subtest :

Individual Deviations from Group Scatter Pattern.

| | Test Group | | Control Group | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| A. Anxiety/Hysteria. | | | | |
| D.Sp. ≧4 below Vocab. | 4 | 10 | 10 | 12 |
| Low weighted score ≦6 | 3 | 3 | 7 | 9 |
| TOTAL | 20 | | 38 | |
| B. "Rationalising" Groups. (O-I Pre., Par. Con.) | | | | |
| D.Sp. ≧ 2 greater than Vocab. | 6 | 7 | 10 | 10 |
| High weighted score ≧15 | 3 | 4 | 3 | 1 |
| TOTAL | 20 | | 24 | |

TABLE XXVI

Arithmetic.

This test is considered a test of concentration. Although cultural background may influence achievement on the last two questions, the first eight questions require only concentration and the utilisation of patterns with which the average population may reasonably be expected to be familiar. Failures on the easy items may be of diagnostic significance, whereas failure on the difficult items may be meaningful in terms of educational background.

The breakdown of the Arithmetic items into three degrees of difficulty was based, as in the other subtests, on the frequency of failures in the control group: 3.5% of the easy items failed, 18.7% of the intermediate items and 52.7% of the difficult items. The comparable failures in the test group were 3.0%, 12.7% and 42.7%, i.e. fewer failures at all levels of difficulty. Thus both groups follow the normal pattern of increasing order of difficulty.

Failures on the easy and intermediate items in all groups were rare and sporadic; where a subject failed more than two of the intermediate items, none of the more difficult ones was passed, failure thus being due to lack of ability rather than lack of concentration. In only one female test case could this be doubted, and here the subject vehemently refused to proceed beyond item 2.

A great drop in Arithmetic score below Vocabulary score is most frequently found in schizophrenics and depressives. In the present groups, three control and one test male, and five control and four test female subjects

had Arithmetic scores that were 5 to 12 points lower than Vocabulary. These will be investigated for further signs of maladjustment.

Extremely low weighted scores, indicating impaired concentration, are common amongst schizophrenics in clinical groups, and in neurotic non-clinical cases. Scores of 6 or less are found in the present control group in four male and six female cases; of these, one subject was 60 years old and four had IQs between 89 and 96, which could account for the low scores without any clinical significance being attached. In the test group, there were two male and three female subjects with scores of 6 or less, no clinical significance being attached to one 60-year-old and one subject with an IQ of 96. The remaining cases may be considered neurotic if there are additional pointers elsewhere in the test.

High weighted scores are most frequently found in the "intellectualising" groups - the obsessives and over-ideational preschizophrenics - and also in schizoid normals. The male homosexual group is the only group to show a rise in Arithmetic above Vocabulary which is statistically significant at .02. Without support from other test signs, this result would not be regarded as indicative of any group trend; but in the present case, it serves as a corroborative sign. (See pages 164 forward.)

Individual scores of 15 or higher were common in the present group, being attained by 15 control and 21 test males, and 5 control and 9 test females. Among the men with scores of 16 or higher, these scores could be expected either by virtue of occupation, such as engineer, architect, accountant, costing clerk and ledger clerk, or by the superior or very superior general IQ, all except two of which fell between 123 and 133. Similarly, except for two cases, the IQs of the women with weighted scores of 16 or 17 fell into one of the two same categories, rangin from 121 to 129.

It will be noted from Table XX and Figure 4 that there are significant sex differences in the Arithmetic subtest, the males scoring much higher than the females in both normal and homosexual groups.

From the six verbal subtests, the following summary may be made, reiterating the findings stated on pages 164 forward:-

(1) Both test and control groups follow the same pattern of subtest scores, with the test group mean in each case being slightly higher. This is in keeping with the higher IQs obtained by the test group, and is emphasised by the percentage of failures at varying degrees of difficulty shown in Table XXVII.

Percentage of Failures

at Various Degrees of Difficulty

| | First Degree | | Second Degree | | Third Degree | |
|---|---|---|---|---|---|---|
| | Control Group | Test Group | Control Group | Test Group | Control Group | Test Group |
| Inf. | 5.7 | 3.5 | 33.1 | 19.2 | 76.0 | 62.5 |
| Comp. | 5.3 | 3.5 | 15.7 | 6.3 | | |
| Sim. | 2.6 | 0.8 | 13.5 | 10.0 | 43.7 | 29.0 |
| Arith. | 3.5 | 3.0 | 18.7 | 12.7 | 52.7 | 42.7 |
| P .C. | 5.8 | 3.5 | 48.0 | 35.8 | | |
| P.A. | 17.0 | 9.3 | 22.7 | 19.0 | | |

TABLE XXVII

(2) Individual cases in each group show various signs of maladjustment which do not affect the group scatter patterns.

(3) The Comprehension and Similarities scores of the homosexual females, in relation to Information and Vocabulary scores, indicate the presence of anxiety in this group.

(4) Digit Span score below Vocabulary level at the highly significant .01 level only occurs in the homosexual female group, emphasising the finding in paragraph 3 above. The same difference between these two scores, but significant only at the .05 and .03 levels, occurs in the female control group and the male test group, where there is no significant difference between Digit Span and Vocabulary scores in the male control group. Anxiety, therefore, to a greater or lesser degree, appears to be rather more prevalent among females and among homosexual males than among a normal male population.

(5) Men score significantly higher than women on Arithmetic. The homosexual men tend to follow the pattern of schizoid normals and of the "intellectualising" groups in their particularly high Arithmetic score.

Picture Completion.

Rapaport considers this to be a test of concentration acting upon visually perceived material; a normal adjustment and no impairment of concentration are the important factors in efficient achievement. All four groups of subjects in the present survey appeared to find this among the easiest of the subtests, the only higher score being attained on Similarities. The one exception is the female test group whose Comprehension score was very slightly, and not significantly, above Picture Completion score; this merely emphasises the relatively high score for this group on the Comprehension subtest which

has been previously pointed out.

A comparison of the two tests of concentration, Arithmetic and Picture Completion, shows that for the males there is no significant difference between the two means, whereas for the females there is a 1% difference in favour of Picture Completion. This emphasises the difference in achievement on the Arithmetic subtest between the sexes, which has already been mentioned.

The Picture Completion items are divided into easy and difficult sections, based on the performance of the control, which missed 5.8% of items 1 to 11, and 48% of the last four items. The test group failures were 3.5% and 35.8% respectively.

Failures on the easy items are of particular interest, normal subjects rarely failing more than one of these. Neurotics and depressive neurotics show a tendency to fail two or more of the easy items; in addition, neurotic depressives frequently have a weighted score for Picture Completion several points below their Vocabulary weighted score but equal to their own performance mean, indicating a general drop in performance level rather than a specific drop on the Picture Completion subtest. The first criterion for neurotic depression was found in five male and ten female control cases (three males and three females having 3 or 4 failures each) and in only one male and four female test cases, none of these having more than 2 failures each. One subject in each group except the homosexual males met the second criterion for neurotic depression; but only one female test subject met both criteria.

Extreme impairment on this subtest is usually only found in clinical psychotic groups. Well-adjusted normals do well on it, and in the present groups there were 53 control cases and 71 test cases with weighted scores of 13 or higher.

It is of interest to note that although the mean weighted score for the males in each group was higher (though not significantly so) than for the females, far more women than men failed number 8 of the easy items (the crab) and number 15 of the difficult items (the man's shadow). The failures were respectively: males, 10 and 35; females 18 and 52. The only picture which seemed to favour the females, who had 43 failures as against 55 failures by the males, was number 14, in which the eyebrow is missing from a woman's profile.

Picture Arrangement.

Picture Arrangement is paired with Picture Completion under the general heading of visual organisation, but the former is assumed to be a test

of "planning ability" and "anticipation", a human ability which is strikingly deficient in the Korsakow syndrome. The ability to anticipate the consequences of initial acts or situations is a reflection of planning ability; disturbances in anticipation make planning impossible and result in failures on Picture Arrangement, due to lack of anticipation and/or to false anticipation determined by overalent ideas. Motor action in this subtest is of a non-essential kind requiring merely the rearranging of the pictures to convey a logical story.

Almost all normal as well as clinical groups show a drop in Picture Arrangement below Vocabulary level, particularly the "intellectualising" groups. Although all four of the present groups show a negative Vocabulary scatter, only the homosexual males show a significant drop, this being at approximately the .03 level. This trend is the same as that indicated by their score on Arithmetic in relation to Vocabulary, which is also achieved by the "intellectualising" groups and by schizoid normals.

The first three series of pictures in this test score two points for the correct arrangement, no alternative being acceptable; the last three score three points each for correct arrangements, but alternative arrangements supported by a logical story may score 1 or 2 points. For the last two series only, if the subject scores 3 or 2 points for arrangement, additional time credits up to 3 points are given if the arrangement is completed within 40 seconds. At the present stage of standardisation, no time limits have been set, but it is interesting to note that where Wechsler's time limits were exceeded, accuracy scores were obtained by six of the control group, and 13 of the test group. In other words, if Wechsler's time limits had been adhered to, the test group mean score would have been reduced slightly more than that of the control group. The longer time taken to reach the correct or acceptable arrangement might be due to over-caution, indecision or lack of confidence because of anxiety, and is again more prevalent among the females and the homosexual males; this is comparable to the Vocabulary scatter of Digit Span for these groups.

Excluding time credits and partial scores, outright failures on the first three easy series occurred in 17% of the control, and in 9.3% of the test group; in the last three difficult items, the failures were 22.7% and 19% respectively. Impairment in this test in a normal population sample may be due to the lack of ability for sophisticated and subtle anticipation, and here it would be interesting, but outside the scope of this survey, to speculate on the significantly higher score of the homosexual women than of the control women.

The "intellectualising" groups tend to do badly on this test and particularly badly in relation to both their Vocabulary level and their modified verbal mean which is based on those tests which hold up well for these groups. There are six of the control group and five of the test group who reveal this pattern. When this pattern is retained, but the Picture Arrangement weighted score is in addition greater than the subject's modified performance mean, it indicates the presence of depression and anxiety, and this occured in one male and one female control case. A Picture Arrangement weighted score below Vocabulary score as well as both verbal and performance means, together with failures on the easy items, is characteristic of schizophrenics; this pattern occurred in two male and four female control cases, and in one male and one female test case.

Thus in the results of this test, indications of maladjustment or of a neurotic adjustment of one sort or another are apparent in 14 of the control cases and only 7 of the homosexual cases in the present survey. The only outstanding group features are (a) the significantly high mean score of the women comprising the test group, and (b) the significant drop in Picture Arrangement score below Vocabulary level by the male test group, which is typical of the "intellectualising" groups.

Object Assembly.

As this test consists of only three items, a quantitative item analysis is hardly possible, the qualitative features of performance being of primary importance here. In clinical cases, schizophrenic chronicity and deterioration may result in visual disorganisation preventing the breakdown of visual patterns into parts, whilst in normal subjects acute tension, anxiety and hyperactivity are some of the factors whose impact on motor action prevents whatever visual organisation would bring about.

Groups of depressives, and the related neurasthenic, hysteric and anxiety and depression groups, have great drops of Object Assembly below their Vocabulary levels. Qualitatively, this depressive retardation of motor speed and/or decision time results in poor achievement since it reduces the possibility of obtaining extra time credit, or even of completing an assembly within the time limit; acute anxiety and neurasthenic retardation also impair efficiency on this test, as well as the presence of schizoid trends.

Figure 4 clearly shows that in every other subtest the homosexual groups, both male and female, have a higher mean score than the control groups whilst approximating the rise and fall in the over-all pattern. In Object Assembly, the mean score of each group drops considerably below the Vocabulary

level, below the mean score for all subtests, and significantly below the modified performance mean, the most significant drop here occurring in the male test group. All groups, however, drop to within .22 points of each other. Hence the drop for the test groups is relatively much greater than for the control groups. Although some impairment appears to be present in the normal group, and may to some extent be induced by anxiety in the test situation since this is the first test to be presented that requores motor effort from the subject, it seems to be present to a much greater extent in the homosexual groups, particularly the males; this may, as stated above, be due to anxiety or depressive trends, or to the presence of schizoid features. It may be noted here that Picture Arrangement score significantly below, and Arithmetic score significantly greater than Vocabulary score, which are also indicative of schizoid features, appeared only in the results of the male test group.

Taking subtest scatter in individual cases, a weighted score for Object Assembly which is much below Vocabulary score as well as below the modified mean performance score indicates the presence of anxiety, and especially neurotic anxiety, to which this subtest is particularly vulnerable. When the Object Assembly weighted score is below Vocabulary level, but approximately the same as the modified performance mean, this indicates depressive trends which affect all the performance subtest scores. Symptoms of either anxiety or depression were shown in this test by 34 control and 45 test subjects, as shown in Table XXVIII.

Object Assembly Subtest :

Subjects Showing Anxious or Depressive Trends

| | Test Group | | Control Grp. | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| Weighted score below Vocab. and below Modified Performance Mean (Anx.) | 20 | 16 | 13 | 12 |
| Weighted score below Vocab. but approx. equal to Performance Mean (Depr.) | 5 | 4 | 4 | 5 |
| TOTAL | 45 | | 34 | |

TABLE XXVIII

Extremely low weighted scores of 4 or less occur most frequently in depressive cases, although they may occur in other cases due to such factors as depressive, schizoid and anxiety trends. The 4 control cases and 8 test cases with such low scores were all included in the anxiety groups above, emphasising the anxiety and depression present in these subjects. It will be

noted here that the number of cases with low scores, as well as the lower group mean score, is more marked in the homosexual group, thus differing from the subtests previously considered.

The main group features arising from analysis of the Object Assembly subtest, therefore, are:-

(1) The mean score for all groups is significantly below the modified performance mean, the most significant drop (t=4.357) occurring in the male test group, and the least significant (t=2.129) occurring in the female control group.

(2) Significant drops below Vocabulary level occurred in all groups except the female control, the most significant (t=5.082) again being in the male test group.

(3) These significant drops may be due to anxiety or depressive trends, symptoms of which have previously occurred in the female test group, or to schizoid features, symptoms of which have previously emerged from the results of the male test group.

Block Design.

Block Design is a subtest on which almost all clinical groups have a positive mean scatter from the modified performance mean. The greatest positive scatter is found in schizophrenics and preschizophrenics, and only psychotic depressives have a significant negative performance scatter, when the severity of impairment increases with the severity of depression and pushes the score not only much below the Vocabulary level, but also below the generally impaired performance level. Schizophrenics, in contrast to their disorganisation on the other subtests, and particularly the primarily visual ones, do not show any special impairment on Block Design. This contrast appears to be a characteristic schizophrenic scatter pattern which is of importance in the differential diagnosis of depressive psychosis and schizophrenia. This schizophrenic pattern is also seen in the preschizophrenic groups, which show a significant superiority of Block Design score over the other performance subtest scores.

None of the groups in the present survey has anegative performance scatter on Block Design. Only the males have a Block Design score significantly higher than Vocabulary, the female test group mean scores being almost the same for both Block Design (mean score 11.88) and Vocabulary (mean score 11.80). In relation to the modified performance mean, again the males have a score which is significantly higher at the 1% level; the female control group is

higher at approximately the 4% level ($t = 2.464$), and there is no significant difference in the test group females. Tables XX and XXI show that the homosexual males score significantly higher than both the homosexual females and the control males. Thus, although none of the groups shows actual impairment on performance in the Block Design subtest, the males on the whole tend to do better than the females; the homosexual males have a relatively outstanding performance which is significantly higher than that of any other group; and the homosexual females, by comparison not only with their other tests but also with the other groups, show up most badly.

Clinically, the only exception to a well retained Block Design score is found among the anxiety and depression and similar groups. The present group which shows the greatest comparative, though not absolute, impairment is the female test group, indicating the presence of greater anxiety than is shown even by the female control group. This pattern in itself would not be important; but taken in conjunction with the high Comprehension and Similarities scores as well as the low Digit Span and Object Assembly scores in relation to Vocabulary, it assumes some significance as supporting evidence of the presence of anxiety and/or depression in the group of female homosexuals.

The general superiority of scores achieved by the males over those of the females appears to be a sex difference similar to but not as pronounced as that which emerged from the Arithmetic subtest results. In the Arithmetic subtest, the male homosexual group was the only one to have a score significantly higher than that of Vocabulary; in Block Design, the same group has the most significant difference ($t = 4.099$) between this test and the modified performance mean, t for the male control group being 3.534, both at the .01 level. This tendency, which shows up in schizoid normals as well as in preschizophrenic and schizophrenic groups, should be borne in mind in relation to the Arithmetic results.

Extremely low weighted scores of 7 or less indicate anxiety; extremely high weighted scores of 16 or 17 occur in schizoid or schizophrenic cases. Scores of 4 or more below Vocabulary scores are most frequently due to depression or neurasthenic sluggishness. The number of individuals showing these scores is presented in Table XXIX overleaf.

Digit Symbol.

The visual-motor co-ordination in this subtest is a delicate interaction between visual percept, spatial-visual and spatial-motor orientation, and the executive action of drawing; performance is easily disturbed from any side.

Block Design Subtest :

Subjects Showing Anxious or Schizoid Scores

| | Test Group | | Control Group | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| A. Anx., Depr., Neurasthenia. | | | | |
| Low weighted score of $\leq 7$ | 2 | 3 | 2 | 2 |
| Weighted score 4 to 6 $<$ Vocab. | 3 | 4 | 4 | 2 |
| TOTAL | 12 | | 10 | |
| Satisfying both criteria: TOTAL | 3 | | 1 | |
| B. Schizoid. | | | | |
| High weighted score of $\geq 16$ | 6 | 7 | 5 | 2 |
| Weighted score $>$ Voc. and $>$ Per. M | 14 | 7 | 12 | 11 |
| TOTAL | 34 | | 30 | |

TABLE XXIX.

Anxious hesitancy and obsessive doubt impair the stability of visual organisation and the percept of what is to be looked for, and where. Motor action becomes hesitent and leads to time-consuming checks and rechecks. A general extreme slowness, without hesitation, doubt, distortion of symbols or over-meticulousness, is rarely seen except in depressives, in whom such retardation of psychomotor speed is a part of the generalised depressive retardation.

Among neurotics, a negative Vocabulary scatter is found among anxiety and depression and obsessive-compulsive groups which is similar to that found among preschizophrenics; normal and other neurotic groups show either a minimal negative or a slight positive Vocabulary scatter. Although normals may show a mild drop of Digit Symbol below Vocabulary, this does not necessarily indicate any real impairment of visual-motor speed, particularly if the Digit Symbol score is not greatly below the modified Performance mean.

In the four groups under discussion, there is a mild mean negative Vocabulary scatter varying from -1.84 for the control males to -.80 for the test females. The females in both groups have a smaller mean negative Vocabulary scatter than either of the groups of males. The difference between the means of Digit Symbol and Vocabulary are significant at 1% for the males, and at approximately 3% ($t = 2.124$) for the control females, and not significant for the homosexual females. When compared with the modified Performance means, the differences are not significant for either of the test groups, but are significant at 1% for the control males and at approximately 3% ($t = 2.438$) for

the control females. Thus both groups of males have a worse performance on the Digit Symbol test than the females, and the worst performance of all in relation to all other subtests is that of the male control group.

Low weighted scores of 6 or less, and a weighted score of 6 or more below Vocabulary score, both indicate depression; extremely high weighted scores of 15 or 16, which is the maximum obtainable, are to be expected mainly in the preschizophrenics, the neurotics and in normals, particularly anxious normals. Subjects obtaining such scores are shown in Table XXX.

Digit Symbol Subtest :

Subjects Showing Depressive or Schizoid Scores

| | Test Group | | Control Group | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| A. Depressive. | | | | |
| Low weighted score of $\leqq 6$ | 2 | 3 | 0 | 9 |
| weighted score $\geqq 6 <$ Vocab. | 3 | 3 | 5 | 4 |
| TOTAL | 11 | | 18 | |
| Satisfying both criteria TOTAL | 1 | 1 | 3 | 0 |
| B. Schizoid (or anxious normals) | | | | |
| High weighted score of $\geqq 15$ | 4 | 7 | 0 | 0 |

TABLE XXX.

The highest mean score on Digit Symbol was attained by the female test group, who were the only group not to have a Digit Symbol score significantly lower than their Vocabulary mean, and who also showed no significant difference between Digit Symbol score and modified Performance score. This relatively high score among normals is, as stated above, especially typical of anxious normals. The relatively low score on Digit Symbol by both male groups, but particularly by the male test group, cannot be said without other intertest supporting evidence to indicate depressive trends. As such a pattern is also found among preschizophrenics, and as both these male groups show a schizoid pattern in their Block Design scores, it is possible that the Digit Symbol pattern is more in keeping with the schizoid than with the depressive trend. This is more particularly liable to be the case with the test group males, who generally follow the schizoid pattern.

3. Qualitative Analyses of Individual Files.

Very few normal subjects complete the Wechsler-Bellevue test in accordance with the theoretical norm, which allows a plus or minus deviation of 2.0 weighted score units from the mean of all subtest scores, this deviation increasing slightly with IQs at either extreme of the scale. In the present group there were only four control and five test subjects who met this ideal norm. In intertest comparison, there are also very few subjects who show no neurotic pointers in their scattergrams, only three of the present control and nine test group subjects coming into this category. As has been emphasised before, therefore, quantitative scores must be combined with qualitative analyses to arrive at a true appraisal of the individual's performance.

A finding of maladjustment should not be made on the basis of one or two neurotic signs in an individual's test result; these may be due to temporary inefficiency, poor cultural background, special ability due to training or interest, or a number of other factors which may influence achievement in either direction on any one particular test.

An investigation of the subtest scores of the present groups of subjects shows that 75% of the control subjects and 85% of the test subjects have from 0 to 4 signs that could point to maladjustment; 59% of the control and 62% of the test subjects show from 0 to 3 such signs. It appears, therefore, that further analysis of individual files should be carried out where a quantitative study shows 5 or more indications that maladjustment is present to a certain degree. The number of cases showing purely psychometric neurotic symptoms is shown in Table XXXI overleaf. It will be noted that there are more females than males, and fewer homosexual than control subjects with an excessive number (5 or more) of such signs.

As none of the subjects in this survey is expected to show evidence of psychosis, they will be classified under the following general headings:-

(1) Preschizophrenic.

(a) Schizoid Personality: withdrawal tendencies in the form of marked anxiety and inhibition or obsessive-phobic thought; lack of colourfulness; limited range of interests; fair adjustment to outside world.

(b) Over-Ideational Preschizophrenia: wealth of phantasy, obsessive ideation, preoccupation with self; introspective; tremendous anxiety incongruous with situations evoking it.

(2) Paranoid Conditions: rigid, compulsive character structure, quarrelsome, suspicious.

Quantitative Neurotic Signs.

| No. of Signs | MALE | | FEMALE | | TOTAL | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | Test | Control | Test | Control | Male | Female | Test | Control |
| 0 | 5 | 1 | 4 | 2 | 6 | 6 | 9 | 3 |
| 1 | 5 | 4 | 6 | 7 | 9 | 13 | 11 | 11 |
| 2 | 12 | 16 | 6 | 7 | 28 | 13 | 18 | 23 |
| 3 | 15 | 14 | 9 | 8 | 29 | 17 | 24 | 22 |
| Total 0 - 3 | 37 | 35 | 25 | 24 | 72 | 49 | 62 | 59 |
| 4 | 8 | 7 | 16 | 12 | 15 | 28 | 24 | 19 |
| Total 0 - 4 | 45 | 42 | 41 | 36 | 87 | 77 | 86 | 78 |
| 5 | 2 | 1 | 5 | 5 | 3 | 10 | 7 | 6 |
| 6 | 0 | 1 | 0 | 4 | 1 | 4 | 0 | 5 |
| 7 | 1 | 4 | 2 | 1 | 5 | 3 | 3 | 5 |
| 8 | 0 | 2 | 2 | 2 | 2 | 4 | 2 | 4 |
| 9 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 11 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 |
| 12 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| Total $\geq$ 5 | 5 | 8 | 9 | 14 | 13 | 23 | 14 | 22 |

TABLE XXXI

(3) Neurotic.

(a) Hysteria: impulsive, childish histrionic behaviour, ready transference, emotional warmth; anxiety.

(b) Obsessive-Compulsive: relative predominance of obsessional and/or compulsive symptoms; over-meticulous, speculative, doubt-ridden and therefore paralysed for action.

(c) Anxiety and Depression: rather successful, rigid, compulsive; intense anxiety and depressive mood under a precipitating event.

(d) Neurasthenia: mild hypochondriasis, flattened, depressive mood, inertia, sluggishness.

(e) Depressive: severe depressive mood, general helplessness, tearfulness and desperation.

Abbreviations used in this section will be as follows:-

Inf. = General Information.

Comp. = General Comprehension.

Sim. = Similarities.

Voc. = Vocabulary.

Arith. = Arithmetic.

D.Sp. = Digit Span.

D.F. = Digits Forwards; D.B. = Digits Backwards.

P.C. = Picture Completion.

O.A. = Object Assembly.

B.D. = Block Design.

D.Sym. = Digit Symbols.

P.A. = Picture Arrangement.

V.M. = Verbal Mean.

P.M. = Performance Mean.

W.Sc. = Weighted Score.

Sch. = Schizoid personality or Schizophrenia.

O-I = Over-Ideational Preschizophrenia.

Par. C. = Paranoid Condition.

Hyst. = Hysteria.

O-C = Obsessive-Compulsive.

A & D = Anxiety and Depression.

Neuras. = Neurasthenia.

Depr. = Depressive.

Anx. = Anxious or anxiety.

Individual Analyses.

TEST GROUP : Males.

Case 2/4. D.Sp. 5 W.Sc. units below Voc. (A&D); Sim., high W. Sc. of 17, but not a superior IQ (O-I); subject failed to repeat 6 D.B. but successfully repeated 7; O.A. lower than Voc. and P.M. (anx.); B.D. high W.Sc. of 16, and greater than Voc. and P.M. (Sch.). Had a gastric ulcer (Anx.) Subject extremely nervous throughout test. Answers characterised by anxiety, verbalised as doubt, e.g. "I think", "Well...", "I suppose", etc.; apologised when he did not know the answer; began 5 consecutive answers in Sim. with "They're a means of..." and 7 consecutive answers in Voc. with "It is..." Limited interests. Colourless. Diagnosis: Schizoid Personality.

Case 4/9. Sim., 2 misses on questions of 2nd degree of difficulty (Neuras.); O.A. less than Voc. and P.M. (Anx.) and low W.Sc. of 4 (Depr. or Sch.); B.D. low W.Sc. of 7 (A & D), and 3 less than Voc. (Depr. or Neuras.). Performance IQ 12 points below Verbal IQ (Depr.). Subject has an habitual nervous giggle, looked harassed, unhappy and almost tearful when not doing well, and needed constant encouragement; gave up easily, proceeded by trial and error without insight, looked for "catches". Diagnosis: Depressive.

Case 7/12. D.Sp. high W.Sc. of 16 (O-I or Par. C.); D.Sp. and Arith. (W.Sc. 17) both high (Sch.); D.Sp. 3 greater than Voc. (Sch.); P.C. less than Voc. and P.M. (Anx.); B.D. high W.Sc. of 17 (Sch.), and greater than Voc. and P.M. (Sch.); D.Sym. high W.Sc. of 15 (Preschiz. or Anx. normal). Answers given in detail as though anxious that no point should be overlooked; queried always whether a required definition should be of the noun or the verb, has a slight nervous head twitch when thinking hard; the mannikin in O.A. described as "a human being - man, boy or soldier." Subject cold, formal, unemotional; has "never been in love", and never had a permanent relationship but prefers to "avoid actual intercourse." Diagnosis: Schizoid Personality.

Case 24/45. Voc., only one failure in words of 4th degree of difficulty, IQ not very superior (O-C); O.A. lower than Voc. and P.M. (Anx.) and low W.Sc. of 3 (Depr.); D.S. 8 below Voc. (A & D); Arith. 11 below Voc. (Depr.); P.A. lower than Voc. and V.M. (O-C) and 2 failures on easy series (Depr.); B.D. 6 below Voc. (Depr.); D.Sym. 7 below Voc. (Depr.). The first three of these signs occur in those tests which are supposed to hold up well with advancing age, whilst the last six occur in those tests which do not hold up well with increasing age. Deterioration loss is 22%[1]. The four essentially verbal tests, Inf., Comp., Sim. and Voc., are from 2.6 (for Inf.) to 7.6 (for Comp.) points above the mean subtest score, and all performance subtests, with the exception of P.C., are generally lowered; this pattern is indicative of depression which, in view of the deterioration loss, does not appear to be entirely due to advancing age. In D.Sp. this subject failed 6 D.F. but repeated 7; his replies generally were rambling and repetitive, giving the impression of "pernicketiness" and fastidiousness, although it was often difficult to keep him to the point; the pig's missing tail in P .C. was not seen, but the answer given was, "If it's a sow, the udders; if a pig, the genital organs"; the mannikin in O.A. was described as a little boy; in B.D., the subject persisted long after time limits and was irritated when the examiner tried to help. Diagnosis: Anxiety and Depression.

Case 31/58. Voc., full score on 3 words of 4th degree of difficulty, having failed previous words of all degrees of difficulty (O-C); high D.Sp. and Arith. (S ch.); D.Sp. 2 above Voc. (Sch.); P.C., failed 2 of easy section (Depr.); P .A. less than Voc. and V.M. (O-I, Par. C. or O-C), with 2 failures on easy series (Depr.); O.A. below Voc. and P.M.

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[1] $\frac{(\text{Inf.} + \text{Comp.} + \text{P.C.} + \text{O.A.}) - (\text{Arith.} + \text{D.Sp.} + \text{B.D.} + \text{D.Sym.})}{(\text{Inf.}) + \text{Comp.} + \text{P.C.} + \text{O.A.})} \times 100 =$ Deterioration loss.

(Anx.), and low W.Sc. of 0 (Depr. or Sch.); B.D. low W.Sc. of 6 (A & D), and 5 below Voc. (Depr.); D.Sym. 6 below Voc. (Depr.) and low W.Sc. of 5 (Depr.); Perf. IQ 37 points below Ver. IQ. Gave Inf. answers in the form of a question; repeated Comp. and Arith. questions before replying; anxious to know if each repetition in D.Sp. was correct; cautious, asked if there was a "catch" in Sim. ques. 12 (fly and tree); inclined to be over-cautious in Voc., e.g. Donkey: "It's a male, isn't it?" Diamond: "It looks like glass, but isn't." Tint: "It's something you do with a colour to get another colour, to bring the old original colour back." Doubtridden; frequently asked if his answer was correct, and repeated himself as, e.g., in Plural: "It's not singular, it's - er - it means more than one. Such as if you say man and men, you mean more than one; or woman and women; or child and children; it means more than one." Armoury: "It's a place used to keep guns and rifles for military purposes; where these different weapons of battle are kept, pertaining to war and that sort of thing." P.C. no. 12 (stream of water), when asked what was missing replied, "The water is going backwards instead of forwards." B.D., perseveration apparent in Design 7, when subject started to reproduce the stripes of Design 6. Although arrangements in P.A. were wrong, subject told ingenious stories to back them up. Subject's home was twice broken by the time he was five years old; suffered from somnambulism and once fell from a height of "45'" sustaining a broken arm; states he was "always highly-strung" and was removed from school because he was the youngest boy and "always top of the class", which was "too much for him." This is suggestive of phantasy since an overall IQ of 98 does not support such a contention. The quantitative signs of depression are all based on the performance subtests, whereas the the verbal subtests, the relative score on P.A. and the extremely low score on O.A. all point to a schizoid personality. When the biographical material is taken into account, together with a certain vagueness in recounting it and the subject's cheerful attitude to the whole test situation with blandness in the face of failure on the practicals, the more probable diagnosis in this case appears to be Over-Ideational Preschizophrenia.

The following six cases are included here to show that relatively few quantitative signs may assume some significance when read in conjunction with qualitative features and case history.

Case 10/23. P.A. below Voc., V.M. and P.M. (Sch.); B.D. high W.Sc. of 17 (Sch.), and greater than Voc. and P.M. (Sch.); D.Sym. 4 below Voc. with B.D. and O.A. well-retained (Sch.). Suffers from asthma and hay fever (O-C). Subject rather cynical; after first Comp. question, enquired, "Are these questions on ethics?", and at last Sim, question replied, "I

can't think of anything - except rather cynically that they're both God's creatures"; queried the spelling of possible alternatives in Voc., and whether the word was a noun or verb. Described the mannikin in O.A. as "A man - Napoleon." Subject colourless, punctilious in manners, cold, withdrawn, unemotional, particularly in regard to his family. Diagnosis: Schizoid Personality.

Case 11/26. P.C. 4 below Voc. and below P.M. (Sch., O-C or Hyst.); O.A. below Voc. and P.M. (Anx.); B.D. high W.Sc. of 16 (Sch.) and greater than Voc. and P.M. (Sch.). Had a gastric ulcer (Anx.). Arith question 4 (share 36 oranges between 4 children), before giving answer, subject queried, "Excluding yourself?" Queried definitions of noun or verb, and alternative spellings; gave both definitions for the word 'nail', stating that one type is found "at the extreme end of claws, hoofs or fingers"; in P.C., instead of the missing tail from the pig, he gave "Udders, if it's a she" and then added, "Tail", insisting on being questioned that the most important missing detail was the udders; in P.A., described the parson as "a vicar in mufti but with his dog collar on", and added that "in a very feminine way" he gets the hat to his liking. Was anxious to know how he had done after each performance subtest. Diagnosis: Schizoid Personality.

Case 21/40. D.Sp. low W.Sc. of 6 (Hyst.); O.A. below Voc. and P.M. (Anx.). Performance IQ 7 below Verbal IQ, occupation mechanic. In D.Sp., complained that he could not concentrate (adding, "We're all so neurotic"), and after 7 D.F. which he failed, asked to leave this test out altogether; the examiner returned to it after the performance section but subject could only repeat 3 D.B. Personal data: "head injury" at age of 5, had "epileptic fits" for two years thereafter which were "cured" by appendicectomy; tonsillectomy at 21; gastrectomy pending at time of test; suffers from migraine; had tried "three or four times" to commit suicide when younger, always by sleeping draughts; has had psychiatric treatment. Subject is a chain smoker and a heavy drinker (remarked in O.A., "I need a drink." Marked hand tremor at this stage of the test and thereafter.) Appearance careless, almost unkempt; emaciated; dissipated; dirty finger nails at 9 a.m. Although only two signs emerge from the scattergram, they seem, when read in conjunction with the personal history, to support a diagnosis of Hysteria.

Case 26/48. D.Sp., failed 6 D.F. but passed 7, making D.Sp. score 2 more than Voc. (Sch.); Sim. relatively poor (O-C); P.A. less than Voc., V.M. and P.M. (Sch.). Subject to asthma (O-C). Examples of some responses: Comp. ques. 1 (letter): "Post it. Not if one suspected - e.g., if it were addressed, say to the Soviet Embassy (Note: symbolically red) or anyone one thought was an enemy of one's country... (Prompt) In

that case, take it to the Department of External Affairs, or whoever deals with foreign affairs. After having opened it to see if there was anything evil in it." Ques. 3 (bad company), "I don't think we have to. (Prompt) We might develop ideas that might have been dormant." (Note: this suggests inherent, inevitable 'badness'.) Ques. 8 (laws), "To stop any evil or evil intentions against others." Voc.: Aseptic, "Not bad. Now... An aseptic person would be someone with not bad habits or having evil intentions." Traduce, "To do wrongly?" Unusual verbalisations were: Fur, "It's the matter that adheres to the skin of certain animals." Bacon, "Is the flesh of a pig, injected with brine and cured." B.D.: In the first example card, subject queried the white lines which are designed merely to show the division between the blocks; he placed blocks on top of one another in Design 7, but persisted without insight by taking one block at a time and trying vaguely to fit it in somewhere for five minutes until helped by the examiner; performance on this test aroused suspicions of prepsychosis, even without the obsessive thought content noted above. Subject is haunted looking and cadaverous; sadistic tendencies connected with blood (cf. first example above); solitary interests - boat-building, carpentry, music, gardening ("You can't have any evil thoughts when you're gardening"); withdrawn, tense; apparently obsessed with "evil thoughts" or fears thereof. Diagnosis: Over-Ideational Preschizophrenia.

Case 29/56. P.A. less than Voc., V.M. and P.M. (Sch.); O.A. less than Voc. and P.M. (Anx.); B.D. high W.Sc. of 15 (Sch.); D.Sym. 5 less than Voc. (Depr.) Perf. IQ 20 points below Ver. IQ, occupation engineer. Failed Inf. ques., "Who invented the steam engine, i.e. the locomotice?" Gave serious thought to all questions. Has a sad expression; subject to "fits of depression" and monthly sore mammary glands. Early home not disrupted, but very unhappy. Diagnosis: Depressive.

Case 41/80. Inf. high W.Sc. of 15, IQ not very superior (O-C); P.A. less than Voc. and V.M. (O-I, Par. C. or O-C.); O.A. less than Voc. and P.M. (Anx.) Performance IQ 35 points below Verbal IQ (Neurotic.) Asthma (O-C). Quality of verbalisation in this test was typical of O-C personality: pedantic intellectualising; perfectionism; ostentatious, circumlocutory, circumstantial display of erudition; rationalisation and doubting; rumination, excessive qualification, over-cautiousness. Subject did not merely answer the questions, but delivered a verbose lecture in a rather condescending manner on each one. One typical example, in which the examiner was unable to record the full answer verbatim, is Comp. ques. 8 (laws). The gist of the answer was, "One cannot exist on one's own, so groups are formed, and so you get a society developing. Then you have to get rules which will benefit the group as a whole, which the majority

believe to be the best way in which that society can live together. Statute laws are different. They are brought in by the Government, and may not necessarily be good for society as a whole; but law in general is brought in to show what is normal behaviour for people as a whole, you see, and if they break it they must be punished by the society in which they wish to live." Rationalisation leading to wrong information occurred frequently, a typical example being Voc. no. 38 (Proselyte): "I don't know. I have heard the word. Pro, before. I'm trying to work out a derivation. I would say as a very broad generalisation, some way different from the normal way one should behave - normal as defined by society, you see." In P.C., subject failed to recognise No. 10 (stream of water) stating after 35", "I don't know what this is", and thereafter was critical of each sketch. Early home broken. Diagnosis: Obsessive-Compulsive Neurosis.

It is interesting to note that of these 11 cases, two were from broken homes and one from an unhappy home; the remaining 8 were all from normal homes, being neither disrupted nor unhappy.

TEST GROUP : Females.

Case 14/24. D.Sp. 6 less than Voc. (A & D); O.A. less than Voc. but equal to P.M. (Depr.); B.D. 3 below Voc. (Depr. or Neuras.); D.Sym. 7 below Voc. (Depr.), and low W.Sc. of 6 (Depr.) Primary dysphemia. When pressed for further information on a question, subject seemed almost resentful and inarticulate to the point of being unable to elaborate. Comp. was slightly higher than Inf. due to such "near misses" as ques. 14 (Battle of Blood River), "Dingaan's Day - Day of the Covenant, December the 7th," and ques. 17 (date van Riebeeck landed in South Africa), "1562." In Arith., subject was quite despondent; she repeated questions vaguely, misheard "a two-shilling piece" as "a shilling", calculated half-a-crown as 24 pence, complained that she was "in a complete panic" and commented, "I can't do figures unless I can see them." Easy sim. questions were answered on a 1-point level, i.e. functional, preceded by the word "for", e.g. for eating, for wearing, for hunting, etc.; even the more difficult ones were still preceded by the same word, "for awareness", "for production", etc. Sporadic mental lapses occurred in Voc., such as No. 4 (diamond), "formed by carbon monoxide"; No. 15 (fable), "a legend with a turn to the fey. Hence the word fable, I suppose? Yes, it must be"; No. 28 (affliction), "the movement of a limb." Voc. throughout was characterised by repetition, as though subject was afraid to commit herself; a few examples will illustrate this. No. 6 (fur), "Fur is the skin, hair - well, hairy skin of an animal. Of animals"; no. 16 (brim), "The area surrounding... The top,

outer top, of an enclosed area, enclosed - er - of a surrounding area. The ultimate circumference of an area, either enclosing or free"; no. 30 (pewter), "A form of metal employed frequently... A form of metal resembling lead. That'll do. It may have lead in it. No, I don't think so." In P.C., subject continued to gaze at the card after the answer had been recorded and then noted minor additional details, but adhered to the first answer as the most important item missing; an example is no. 8 (crab), "Hind claw. Is this a crab or a crayfish? If it's a crayfish, the antennae too." When told in B.D., "For the next two designs I want you to use 9 blocks", subject counted to make sure that there were, in fact, nine; she talked to herself either critically or encouragingly throughout this test. Motor activity was retarded by a pronounced hand tremor, on which she herself commented, "I've got the shakes." Symptoms on the whole are not sufficiently severe to justify a finding of depression, but point rather to a diagnosis of Anxiety.

Case 22/46. Inf., more than 2 failures on easy questions (Hyst. or Neuras.); Comp. 6 greater than Inf. and 3 less than Voc. (Anx. or Hyst.); Sim. high W.Sc. of 16, IQ not very superior (O-I or Par. C); D.Sp. low W. Sc. of 6 (Hyst.); P.C., 2 failures on easy section (Neurotic or Depr.); P.A. less than Voc., V.M. and P.M. (Sch.); O.A. less than Voc. and P.M. (Anx.), and low W.Sc. of 4 (Depr. or Sch.). Answers characterised by childishness, a bland indifference to lack of knowledge, mispronunciations or misuse of words, and ingenuous evasions ("I did know, but I've forgotten and would rather not guess.") Examples are Inf. no. 5 (function of the heart), "The heart beats, it throbs. (Prompt) It keeps the body alive, that's all I can tell you"; no. 8, "There are 8 pints in a quart" (subject was a publican for many years); Comp. no. 6 (land in a city), "It's able to give a livinghood to so many people"; no. 8 (laws), "To make a right-abiding people"; no. 10 (deaf, talk), "They don't have the sense of hearing to find the pronounciation." Vocab. no. 17 (guillotine), "An instrument used in France - used to be - for execution of criminals. (Prompt) For beheading. Or am I mixed up with the stocks now? No, that's right, isn't it? The stocks were for cutting off their arms and legs, weren't they?"; no. 31, (catacomb), "They're in Rome; they're the ruins of buildings in Rome, the monasteries. I've been over them, I ought to know. That's right, isn't it?" Although subject showed no sign of panic at Arith., she commented at the start, "I need my ready reckoner for any arithmetic," and was quite unperturbed by failure but accepted assistance as a matter of course. After failing 4 D.B. she passed the 5 series. P.C. answers were rather naïve; no. 1, "The nose. That's very simple;" no. 6, "The flag. Chimney - I mean funnel"; no. 7 (man's ear), "Cigarette"; no. 10 (doorhandle),

"I'd say the knocker"; no. 15 (Man's shadow), "Pathway. Or the ground, rather - is that right?" Sexual confusion was apparent in O.A. where the mannikin was ambiguously described as "a figure" and the profile as "a man's head." Subject has severe dysaudia and has had an unsuccessful fenestration operation on one ear; she had to give up ballet dancing after two years because of rheumatic fever; home life was broken at the age of 2. Throughout the test, subject was responsive, warm and childishly dependent, without obviously looking for help. Diagnosis: Hysteria.

Case 24/51. Sim., high W.Sc. of 17, IQ not very superior (O-I or Par. C.); D.Sp. 9 greater than Arith. (Sch.); Arith, more than 2 failures on easy questions (Sch. or Depr.), and 12 below Voc. (Sch. or Depr.), also extremely low W.Sc. of 1 (Neurotic); O.A. equal to Voc. and greater than P.M. (Sch.); B.D. 3 less than Voc. (Depr. or Neuras.); D.Sym. 5 less than Voc. (Depr.) Suffers from nervous dyspepsia (A & D). Was very nervous during first two subtests; had an inane giggle. The outstanding feature of this test was the subject's blunt and dogged refusal to acknowledge the existence of figures, even to the point of stating that she had no idea what her monthly salary was. A previous job, which she hated for the entire 11 years that it lasted and which necessitated dealing with figures, led eventually to frequent blackouts which finally compelled her to resign. This obsession with figures was demonstrated as early in the test as Inf. ques. 7 (weeks in a year), to which the reply was, "I don't know. (Prompt) There are 4 in a month, and 12 months in a year... No, I can't work it out", and later in ques. 18 (distance from Cape Town to London), "It takes 3 weeks. (Prompt) I don't know. I just don't know figures at all." When it came to the Arith subtest, subject answered ques. 1 without thinking, then said, "I honestly have no idea of figures - I nearly go mad at the thought"; in spite of encouragement and help, she just apologetically but firmly and stubbornly insisted that she "honestly didn't know", and refused to make any except facetious attempts. The disparity between D.F. and D.B. (8 and 4 respectively) was a further neurotic sign. The phraseology in Voc. was somewhat peculiar for a middle-aged woman, e.g. no. 1 (apple), "It's a fruit, a bad little fruit much maligned since it stuck in Adam's throat"; no. 2 (donkey), "A funny little animal, always looks a bit depressed since Christ trotted along on one to the Crucifixion, and has borne a slur ever since. A funny little beast of burden, stubborn too. A silly little ass" (note that both these Biblical references are incorrect); no. 4 (diamond), "A diamond is a precious stone which is dug out of the earth, and when cut is very beautiful and people fight and go mad over it. A lot of trouble has been caused by them"; no. 6 (fur, "The covering of an animal - it's its coat. And when we take the animals out, we put them on

ourselves for coats"; no. 9 (gamble), "Chuck your money about, play the dice and have a whale of a time at Monte Carlo. Gamble is to chance." This child-like way of expressing herself persisted throughout P.C. in parenthetic and usually facetious remarks from no. 5 onwards, the answers being: no. 5, "Half his whiskers, moustache. The moths have been at him; 6, no funnels - shame. Poor little boat. No mast either, or wireless aerial, or portholes - lot of things missing; 7, hasn't got any ears, poor thing; 8, crab with half his legs missing - or one leg off, anyway; 9, he hasn't got a tie - but perhaps he didn't even want one. Perhaps he hasn't got one?; 10, no doorhandle. How ever are they going to get in?; 11, one of the diamonds has fallen off and got lost; 12, it isn't pouring out properly. Do you suppose they meant it to?; 13, if she's powdering, should have a powder puff up here. Or is she having a chat with a girl-friend through the window?; 14, no eyebrows, but perhaps she likes it that way; and no. 15, supposed to be going down a road with no road there. Or should he have a shadow? Perhaps he's dead, because then you don't have a shadow." In D.Sym., subject snatched the pencil and started before the patter had been completed; at the end of two minutes, she said, "I was just getting into my stride - why didn't you let me finish? I wanted to do them all." Her comment on the P.A. series 4 (prospector and vulture) was, "Poor little gran' pop. Is that how it goes?" The home life of this subject was broken by the time she was 9, and her mother was decidedly eccentric. Her own interests, apart from the theatre, are entirely solitary. This subject seems to be precariously adjusted, shows anxiety, depression, obsessive or phobic thought, and some phantasy. Diagnosis: Preschizophrenia.

Case 25/52. D.Sp. high W.Sc. of 17 (O-I or Par. C.), 9 greater than Arith (Sch.) and 3 greater than Voc. (Sch.); P.A. less than Voc., V.M. and P.M. (Sch.); D. Sym. high W.Sc. of 15 (Preschiz., neurotic or anx. normal). Subject looks dreamy-eyed; has not much faith in herself, was extremely nervous, hesitant, slow and rather agitated; took the test very seriously and had a "frightful headache" at the end. Possible indications of guilt feelings: Voc. no. 21 (hara-kiri), "It's a belief practised in Japan which necessitates suicide in order to redeem oneself"; O.A., no. 3 was described as "an outstretched hand"; P.A. no. 1, subject was "looking for the passenger", and in no. 4 described the prospector as "probably a fugitive running away." Diagnosis: Schizoid Personality.

Case 37/77. D.Sp. less than Voc. (A & D); D.B. greater than D.F. (Maladj.); O.A. less than Voc. and P.M. (Anx.); B.D. 3 less than Voc. (Depr. or Neuras.); D.Sym. 7 less than Voc. (Depr.) Used schoolgirl slang phraseology which was suddenly dropped at the beginning of Voc. when,

after the patter, subject sighed contentedly, "Ah!" as though she felt that she had now come into her own. Replies in Comp. suggested unsophisticated stereotypes rather than sound adult judgment, e.g. ques. 2 (cinema fire), "'Should?' Go out straight away to the authorities and say so - tell them something's cooking"; ques. 3 (bad company), "What do you class as 'bad company'? It depends on the individual; some can withstand bad influence and some can't. If you feel you can, there's no point in keeping away - it might be quite interesting"; ques. 4 (taxes), "It's for the good of the general community"; ques. 7 (motor vehicle licence), "It's your whack towards the building of roads as 'twere"; ques. 9 (passport), "Because he has to." Although only 5 D.F. and 6 D.B. were scored, subject was able to repeat 7 D.F. The first 6 Sim. items were answered on a 1-point functional level, and in no. 7 the word "compulsion" was used, without being noticed, instead of "propulsion"; only at this stage did the subject appear to give any thought to her answers. In Voc., nail was defined as "a piece of steel with one sharp point and one flat head", and "plural" surprisingly yielded only a 1-point answer between 13 2-point answers, being defined as "Plural means not one; two. (Prompt) You talk about two objects, not one; then you're using the plural." The missing funnel of the ship and ear of the profile were both given in the plural. At this stage, the subject reverted to slang, perhaps feeling a little less self-confident, and described the mannikin as "a bloke", and the profile vaguely as "somebody's" head. In B.D. she used her right hand only, thus prolonging the performance time for each pattern, and in D.Sym. handled the pencil awkwardly, as though unaccustomed to writing. Although the pattern of scores in this case seems to indicate depressive trends, the subject rather gave the less severe impression of anxiety; her assumed attitude of adolescent irresponsibility, and the lack of mature depth of thought and judgment might be interpreted as an early indication of withdrawal from reality which, together with the symptoms of anxiety, could point to a preschizophrenic condition. The present diagnosis, however, should be one of Anxiety.

Case 42/92. Inf., more than 2 failures on items of first degree of difficulty (Hyst. or Neuras.); Comp. 7 greater than Inf. and 3 greater than Voc. (Anx. or Hyst.); D.Sp. relatively low (Anx.); Sim., 2 failures on second degree of difficulty (Neuras.); Voc., 3 passes on words of 4th degree of difficulty (O-C); P.A. less than Voc., V.M. and P.M. (Sch.), and 2 failures on easy series (Sch.); O.A. greater than Voc. and P.M. (Sch.); D.Sym. 4 below Voc. (Depr.) and low W.Sc. of 5 (Depr.). Answers usually given in the form of a statement followed by a question ("... , isn't it?" or, "Am I right?"), or in the doubting form of a question ("Would that be...?"

or, "Isn't that...?") Human figures in the practical section were always referred to as ladies or gentlemen. In B.D., subject brushed aside with irritation offers of help, and stubbornly persisted even though the last design took 8' 6" to complete, the time limit being 3' 15". After the correct arrangement of a series in P.A., subject continued to scrutinise the cards for as long as 40" before indicating that she was satisfied. From childhood, subject had only one ambition, to be a mechanic in a garage or an electrical engineer; although thwarted in this, her boast is that there is nothing mechanical or electrical that she cannot repair. At the age of 5, she had double pneumonia, and a weak heart (eventually cured by three years' exercises) prevented her from attending school until she was 8; she left after standard 6, and has always regretted her lack of formal education. Her present state of health she describes as "rotten", adding that she has a perpetual headache, "never free of it for a moment", and "never sleeps at all." Diagnosis: Hysteria or Anxiety.

Case 44/94. Arith. 8 below Voc. (Sch. or Depr.), and low W.Sc. of 4 (Neurotic); D.Sp. 8 below Voc. (A & D), and low W.Sc. of 4 (Hyst.); Sim., 2 failures on second degree of difficulty (Neuras.); O.A. less than Voc. but equal to P.M. (Depr.); B.D. 4 below Voc. (Depr. or Neuras.). In the verbal section, subject was unsure, hesitant and inclinèd to "waffle"; when not sure of herself, tended to become facetious and wander away from the point as though to talk her way out of admitting ignorance. In Arith., she made a great display of being "completely helpless where figures are concerned", adding, "I always leave that sort of thing to my Treasurer or a Committee member"; in support of this contention, Arith. was punctuated by such remarks as, "21d. is 1/8d., isn't it?" "Is two-thirds the same as $\frac{3}{4}$?" "I don't know how to start, even." "I couldn't possibly do it", etc. In direct contradiction to this professed helplessness, however, the answer to Inf. no. 7 (weeks in a year) was, "There are 365 days... I know there are four months with five weeks; that leaves eight with four weeks. That's 8 X 4 = 40, no, 32; and 4 X 5 = 20. That's 52." A further neurotic sign was the subject's failure of 6 D.F., and passing both 7 series, making a great discrepancy between D.F. and D.B., of which she could only manage 3 figures. After giving the correct answer to no. 11 in P.C., "One diamond", she added, "It should be red, too, not black." (All the sketches in this subtest are in black and white.) The mannikin in O.A. was described as "The figure of a man - must be a doctor", and the profile as "a lady." Subject comes from a broken and unhappy home; she had four serious illnesses between the ages of 2 and 10; claims that she has "always got away with things on bluff and personality." Underneath the present facade of

success, there appears to lurk some apprehension. This was clearly revealed in her reactions to any request for an elaboration of replies; then it seemed that the first evasive answer might have been deliberately vague and she resented any request to clarify, since this might have been interpreted as tantamount to "calling her bluff." Diagnosis: Anxiety.

Case 46/96. D.Sp., high W.Sc. of 16 (O-I or Par. C), also 3 greater than Arith. (S ch.); P.A. below Voc., V.M. and P.M. (Sch.); O.A. less than Voc. and P.M. (Anx.); B.D., high W.Sc. of 15 (Sch.); D.Sym., high W.Sc. of 15 (Pre-sch., neurotic or anx.). Subject answered promptly and concisely, with a good command of language; said, "I can't do arithmetic" but did not panic and her only error here was, rather unaccountably, to work 2 X 48 ad 84. Digits in D.Sp. were visualised, "like reading music." O.A. completions were given as, "A man; looks a bit like a clergyman", and no. 3, "A child's hand." The only peculiar error was in P.A. series 3 (tandem), where she said, "A man and his girl - she's sitting on the handlebars." Signs of anxiety were a gradually increasing flush as each test progressed and greater effort was exerted, and the subject's persistent requests after the test to know how she had done, where she had failed, and whether she had given a "normal" performance. Her attitude was one of impersonal co-operation; she tried very hard, but this was for her own satisfaction and without reference to the tester whom she seemed to look upon rather as an invigilator at an examination; rapport could not be established beyond this point. Early home environment was matriarchal and unhappy. Interests solitary. Diagnosis: Schizoid Personality.

Case 47/97. D.Sp., 6 below Voc. (A & D); P.C., 2 failures on easy section (Neuras. or Depr.), and W.Sc. 3 below Voc. but equal to P.M. (Depr.); O.A. below Voc. and P.M. (Anx.); B.D. 3 below Voc. (Depr. or Neuras.). Subject was very nervous throughout the test. To ques. 2 of Comp. (cinema fire), gave the impulsive answer, "Shout out 'Fire!' I should think," and did not reflect any further or add a more sound reply. At Arith patter, she panicked badly, saying, "Just put down 'Nought' immediately" and similar remarks; refused even to try most of the problems without help, merely maintaining, "I can't do it"; in D.Sp. too, she distracted herself by stating, "I can't" before each repetition. The response to P.C. no. 11 (one diamond missing) was merely a stolid, "I don't know anything about playing cards." In the middle of the patter for O.A., subject interrupted with, "I can't do these things", and she assembled the hand reversed. Before each block design, and before the D.Sym. patter was even started, subject said, "I can't do this." The first P.A. series was arranged and

read from right to left, and the last one caused complete bewilderment; at 2' 7" she said, "No. I can't make a thing out of this. Is it two parsons with two hats, and he thinks he's got the wrong one?" After the first move at 3' 7", commented, "One parson is fatter than the other", and when the final arrangement was completed (wrongly) at 3' 39", she could not fit a suitable story, but merely shrugged helplessly and said, "No. I can't see anything here." Diagnosis: Depressive.

In contrast to the male test group, three of the above female test subjects were from disrupted homes, two from unhappy homes, and only four from normal homes.

Control Group.

It must be emphasised here that the control group of subjects was tested for the Wechsler-Bellevue standardisation project, and by a number of different testers who were interested primarily in achievement and to a great extent ignored personality. From this point of view, therefore, the records are incomplete, and qualitative studies along the above lines cannot be attempted on all cases. Such analyses for the control group have therefore had to be curtailed because of lack of information and comments by the testers and their failure to record accurate if not verbatim answers in all cases.

It will be noted from Table XXXI, however, that there are 8 male and 14 female control subjects with five or more scattergram signs of neurotic pattern. Of these, only 7 male and 6 female files were completed in a manner open to qualitative analyses.

CONTROL GROUP : Males.

Case B/7/6. Sim., failed 2 items of second degree of difficulty (Neuras.); D.Sp., high W.Sc. of 18, the maximum total for scoring purposes being 17 (O-I or Par. C); D.Sp. 7 greater than Arith. (Sch.), and 8 greater than Voc. (Sch.); O.A. below Voc. and P.M. (Anx.), and low W.Sc. of 4 (Depr. or Sch.). Digits in D.Sp. visualised (frequent amongst schizoid personalities.) The anxiety of a schizoid personality is apparent in the subject's querying of spellings, even such simple words as 'nail', and whether noun or verb definitions were required; inhibition shows in his inability, or refusal, to enlarge on a point and elaborate it to make the actual meaning of his answer more clear. P.C., failed to recognise the drawing in no. 8 (crab) and asked, "What is this - a lobster?"; in no. 5,

a full face drawing of a man with one half of his moustache missing, his reply was "One ear." O.A. was characterised by trial and error without insight, the profile only being recognised on completion; subject asked if there was a piece missing, and wahted to know whether the portions of the hand were the right way round. Diagnosis: Schizoid Personality.

Case A/4/21. Voc., only one failure in 4th degree of difficulty (O-C); Inf., high W.Sc. of 16, IQ not very superior (O-C); D.Sp. 5 below Voc. (A & D); P.A. below Voc., V.M. and P.M. (Sch.); B.D. 3 below Voc. (Depr. or Neuras.); D.Sym. 7 below Voc. (Depr.); P.M. 12 below V.M., occupation engineer. The most important factor in this test is the quality of the verbalisation which was characterised throughout by pedantic and ostentatious intellectualising, rationalising and ruminating. Where a question required only a brief or even one-word answer, the subject elaborated unnecessarily. A few examples will serve as illustrations. Inf. ques. 4 (What does rubber come from?), "There are two kinds. Natural rubber is tapped from the latex of trees in Malaya. Synthetic rubber is made from buna and that range, mixed with sulphur", and here followed full details of how it is manufactured. Ques. 5 (What is the function of the heart?), "The heart is a pump. It has one function, to pump blood into the circulatory system", followed by full anatomical details. Ques. 21 (What is the total population of the Union of South Africa?), "Now, the most recent census... At a guess, around 3,000,000 European population. (Prompt, "Total".) It used to be 10. I'll settle for 12,000,000, all colours. That seems to me about right." Even when an answer was incorrect, subject was prepared to try and rationalise or "intellectualise" it into accuracy; e.g. Comp. ques. 10 (Why are people who are born deaf usually unable to talk?) "Because if you're deaf, you may be able to talk, but the fact that you can't check on yourself deters you. (Prompt) If a child makes any sound, he's conscious of them, and gets association with the learning process and lip movements; he notices that he gets responses from others from this movement. Later he correlates other people's similar actions with his own activities. So in order to talk, you must be able to hear yourself talk - that sums it up." In D.Sp., the figures were visualised as, "7 - a long leg down; 5 - a tall hat. Therefore some fit into a datum line, as 1; others are above or below the datum line, giving irregularity of pattern." Subject added that the numbers were given too slowly, volunteering the information, "I can remember phi to 10 decimal places in 3's." Excuses were made for any failures. For one so pedantic, it was surprising to hear "smoke-stack" rather than "funnel" for no. 6, and "ears" for "ear" in the profile of no. 7 in P.C., when the liquid in no. 12 was referred to as "the

falling solution." Every symbol for the figure 5 after the first one in D.Sym. was incorrectly made as a '$\mathcal{U}$'. The symptoms of anxiety and/or depression in this case were probably due to the fear that, without being able to rationalise verbally to his own complete satisfaction, he might not be performing as well as he felt he should, and there was no way of finding out in order to reassure himself. Diagnosis: Obsessive-Compulsive.

Case B/6/1. Arith. 5 below Voc. (Sch. or Depr.); P.C. 3 below Voc. but equal to P.M. (Depr.); P.A. below Voc. and V.M. (O-I, Par. C. or O-C); B.D. low W.Sc. of 7 (A & D), and 5 below Voc. (Depr. or Neuras.); D.Sym. 6 below Voc. (Depr.), and low W.Sc. of 6 (Depr.). Subject lacked concentration in Arith., became irritable, refused to try if first answer was wrong, and wanted to stop the test altogether. The first of 5 consecutive failures in P.C. was the playing card, the nine of diamonds with one diamond missing; here the subject said, "The illustration. (Prompt) Of the King or Queen of spades." In all the practical subtests, subject appeared agitated and had a pronounced hand tremor with perspiration which he ascribed to "nerves". Diagnosis: Neurotic Depressive.

Case B/4/15. P.A. below Voc., V.M. and P.M. (Sch.); O.A. below Voc. and P.M. (Anx.); B.D. high W.Sc. of 15 (Sch.), and greater than Voc. and P.M. (Sch.) Supporting schizoid evidence, only assuming weight because of the foregoing, D.Sp. greater than Arith. (Sch.), and both high weighted score (Sch.). Although not having delusions of grandeur, subject gave evidence of feelings of grandeur by his general smug references to his own knowledge and his complete self-satisfaction. As examples, some replies to Information questions may be quoted. Ques. 18 (distance from Cape Town to London), "I would say 6,000 miles." Ques. 21 (population of the Union of South Africa), "About 12,000,000 at the moment, I would estimate it." Ques. 22 (Who wrote "Faust"?), "Might be Mendelssohn. No - his was heavy stuff. I don't know." Comp. ques. 1 (the letter in the street), "In this case, I'd bring in into the factory and give it to the girl to post. Or take it home and post it when convenient." Questions were usually finalised by such comments as, "That sums it up", "That puts it in a nutshell", "That's all", or "That's all anybody can say about that." Subject was suspicious - he admitted that he was "looking for the catch" in Arith. - and inclined to be argumentative. In Comp. ques. 5 (Why are shoes made of leather?) the immediate response was, "They're not all made of leather." When asked to elaborate his first answer to ques. 9 (the passport), he replied, "That's self-explanatory", and in the last question (people born deaf) commented, "'Usually' is right, because some deaf people can talk," In P.C., this

subject attempted to be rigidly correct, stating the left side of the moustache, the right hand rear leg, and the ninth, middle, spot were missing. Unable to complete the hand in O.A., he stated that there was something missing, and throughout B.D. he appeared oblivious of the presence of anyone else and gave himself audible instructions for placing each block. All symbols for 5 in D.Sym. were incorrectly reproduced as 'U's. Diagnosis: Paranoid Condition.

Case D/8/26. P.C., 3 misses on easy series (Neuras. or Depr.); O.A. less than Voc. and P.M. (Anx.) and extremely low W.Sc. of 0 (Depr. or Sch.). These two subtests should hold up well with increasing age. D.Sp. 5 greater than Arith. (Sch.), and 4 greater than Voc. (Sch.); B.D. low W. Sc. of 7 (A & D); D.Sym. extremely low W.Sc. of 3 (Depr.). These 3 subtests do not hold up well with advancing age. Deterioration loss, 2%. Many Inf. questions were almost correct, e.g. rubber - the juice out of certain plants that grow in the Congo (subject unable to elaborate); Mexico is in North America, to the side, not in the middle; Cape Town is 7,000 miles from London (up to 6,500 miles is acceptable); total population, worked out carefully by subject, 11,000,000 (12,000,000 is acceptable). Similarly, two Arith. questions and two P.C. cards were answered correctly but after the time limit. Words that he did not know in Voc. were always followed by a request for the definition. Poor visual organisation was emphasised in O.A. by the subject's attempt to fit the fingers on edge into the inter-finger spaces of the palm. The last P.A. series (the parson), in which only the parson himself appears in all six cards, was translated as, "A man walks up to a lady, her husband came back and kicked him out, and here he went to the police to complain about it." The introduction of the woman, the husband and the police is suggestive of phantasy rather than anxiety. In spite of impaired sight and hearing, as well as advancing years, this subject rides a motor cycle. Diagnosis: It is difficult in this case to decide whether the predominating features point to anxiety or to a schizoid personality, but since anxiety is a component of schizoid adjustment, the more likely diagnosis appears to be Schizoid Personality.

Case C/3/4. D.Sp. 4 less than Voc. (A & D); Arith. low W.Sc. of 4 (Neurotic); D.Sp. 5 greater than Arith. (Sch.); Arith. 9 less than Voc. (Sch. or Depr.); O.A. less than Voc. and just below P.M. (Depr.); D.Sym. 7 less than Voc. (Depr.), and low W.Sc. of 6 (Depr.) Occasional "near misses", indicating anxiety, in Inf. and Arith., such as the Koran is the Russian equivalent to our Bible; distance from Cape Town to London, 5,000 miles (5,500 is acceptable); Louis Stevenson invented the locomotive; $9\frac{1}{2}$

instead of 9 oranges for Arith. ques. 4; 4 instead of 4 X 7 for ques. 5; $7\frac{3}{4}$ hours instead of 8 hours for ques. 6. This subject, who is married and has five children, served a four-year apprenticeship as a hairdresser, and two years thereafter, broken by six years' war service, at this occupation. He finally gave up hairdressing because he "hated it", and has since had five jobs in seven years, twice being retrenched and resigning on one occasion because he "had a row with the foreman." This occupational history lends support to the quantitative findings above. Diagnosis: Depressive.

Case A/2/36. Comp. less than Inf. and Voc. (O-C), and 3 failures on 2nd degree of difficulty (Neuras. or impaired judgment); D.Sp. and Arith. both high, scores of 18 and 16 respectively (Sch.; but Arith might be influenced by his profession of accountant); D.Sp. high W.Sc. of 16 (O-I or Par. C), being 6 greater than Voc. (Sch.); O.A. less than Voc. and P.M. (Anx.); B.D. greater than Voc. and P.M. (Sch.); performance IQ 22 points below verbal IQ. Inhibition, withdrawal or anxiety were apparent in the verbal part, where many answers required prompting for further elucidation. In P.C., subject's failures were typical of "loss of distance", i.e. characterised by loss of appreciation that he was dealing with a sketch, and subject therefore took the pictures too literally as the real thing, supplying as missing parts items that in a sketch were obviously not intended to be included; the failures were no. 5 (half the moustache), "The path in his hair"; no. 9 (man's tie, sketch showing the figure only from the waist upwards), "The fingers of one hand"; and no. 14 (eyebrows), "The bottom of her one lip." The same type of error led to a low score on the mannikin in O.A., where one leg was placed in reverse so that, although it obviously did not fit, both feet were thereby made to point in the same direction; on being questioned, the subject stated that he was quite satisfied with his assembly. Similarly in the hand, the first and fourth fingers were interchanged. Each symbol for 5 in D.Sym. was wrongly reproduced as a '$\perp$', and in P.A. the subject saw the figure in the last series as two people, saying that after adjusting his hat in the mirror the man "walks on again - except that it's not the same man." Although he plays rugby, this subject's other interests are solitary - fencing, fishing and woodwork. Diagnosis: Schizoid Personality.

CONTROL GROUP : Females.

Case A/6/14. Inf., more than two failures on 1st degree of difficulty (Neuras. or Hyst.); Comp. 3 greater than Inf. and 5 greater than Voc. (Anx.); D.Sp. low W.Sc. of 6 (Hyst.), but greater than Arith. (Sch.);

Voc. 5 failures on 2nd degree of difficulty (Neuras. or Depr.); Sim., 2 failures on 2nd degree of difficulty (Neuras.); P.C. 2 failures on easy section (Neuras. or Depr.); P.A. less than Voc. and V.M. (O-I, Par. C. or O-C), and 2 failures on easy series (Neurotic); O.A. less than Voc. and P.M. (Anx.), and also low W.Sc. of 3 (Depr. or Sch.); B.D. low W.Sc. of 4 (A & D); D. Sym. low W.Sc. of 6 (Depr.). Extreme scatter of subtest scores, from 3 to 11 (Sch.); failure on easy questions and passing more difficult items in Inf. and Voc. (Sch.). In Inf. there were some impulsive and absurd answers, e.g. no. 4, rubber is a tar preparation; no. 11, a whale is an underwater fish; no. 20, Hans Andersen wrote "Jock of the Bushveld". Comp. showed some peculiar phraseology, e.g. ques. 3 (bad company). "It's injurious to our lack of thought"; ques. 4 (taxes) "It keeps us on the financial side of life"; ques. 7 (motor vehicle licence), "It keeps the maintenance of the vehicle"; and ques. 8 (laws), "To prevent against criminal offences." The answers to the Arith. problems were ridiculous and given with a bland disregard for their absurdity; subject also seemed unconscious of peculiar verbalisations or misuse of words, such as Sim. no. 6 (air and water), "Breathing is air and water is washable"; no. 11 (praise and punishment), "They react on one's being - it's a self-possessed thing"; Voc. no. 13 (armoury) "It's a plate of armour"; no. 17 (guillotine), "A wooden and iron preparation"; no. 19 (plural), "A double evention"; no. 33 (mantis), "One of those little animal-y things with thousands of legs and a long body. They usually come in swarms. South Africans regarded it as a bad odour, a sign of death. A superstitious kind of animal"; no. 34 (chattel), "Pick up your goods and chattels. All my valuables around me, may be clothes, ornaments... My whereabouts"; P.A. no. 2, "He's holding a piston at a passer-by." This subject is a practising nursing sister, with two years' training in children's nursing and two years in fever nursing in addition to her $3\frac{1}{2}$ years general nursing training and matriculation. Questions incorrectly or insufficiently answered, contrary to her special training, were Comp no. 10 (deaf - talk), "They can't contact sound. And the vocal cords are impaired through the deafness. They can make a sound, but are not able to withdraw the sound from the vocal cords;" Voc. no. 8 (knuckle), "A bone, usually found in the hand, covered with flesh. (Prompt) Part of anatomy. There are ten altogether, five on each hand. Serves to knock at a door with"; no. 14 (nitroglycerine), "A substance of nitric acid in glycerine. Can be used for sores, wounds"; no. 22 (microscope), "Oh, that's what you differentiate little bugs from. It's for diagnostic purposes quite a lot. Flies, or urine." Strained "clang" associations were also evident in Inf. and Voc.; although the correct

answers were not known, subject was prepared to guess via these associations, e.g. Habeas Corpus, "I don't know what a Habeas Corpus is. I only Christius Corpus"; cedar, "I only know of a car by the name of Cedar make. (sedan?) Is it a chap that plants seeds?"; hara-kiri, "I only know hurricane. Is it something like a stick? A weapon of some sort?" (Knobkerrie?); vesper, "I only know vestry, in a church. Is it the chappie that... He may listen to confessions, or he may take the collections"; catacomb, "I know catechism. And caterpillar. Is it an animal?"; stanza, "To do with stamina. To standardise a thing." P.C. was characterised by frequent reference to items or details obviously not intended to be present, e.g. no. 2 (pig's tail), "Udders. (Prompt) Two legs"; no. 8 (crab's claw), "His fang - fin"; no. 9, "His collar - I mean tie"; no. 12 (flow of water), "The spout of the jug. There's a crack off"; no. 15 (man's shadow), "An arm." Subject's approach to O.A. was without any plan or response to cues; even after she had recognised the third assembly as a hand, she accepted as quite satisfactory the absurd placing of two of the fingers in the crook of the thumb and at right angles to the palm. Similarly in B.D. she was quite satisfied with grossly incorrect designs, such as having three blocks in a row "and one over" for design 2, which should be a square made out of 4 blocks; she refused to try design 6, saying that she "didn't like this", and would not go any further in this subtest. There were marked fluctuations in rate of work in D. Sym., varying from 11" to 20" to reproduce five symbols. In P.A. there appeared to be very little continuity, each card merely being described in isolation. After completing the test, subject told a colleague that there were only two questions throughout that she had failed to answer. In view of her training and occupation, the low score attained by this subject is remarkable; all the foregoing examples of bizarre responses, absurdities, "clang" associations, unexpected failures, etc., are typical of the bland "good front" and the impaired judgment and concentration of schizophrenics; in this case, the qualitative analysis is more revealing and of greater importance than the purely quantitative scattergram. Diagnosis: Preschizophrenia.

Case C/7/8. D.Sp., low W.Sc. of 6 (Hyst.); Sim., 2 failures on 2nd degree of difficulty (Neuras.); P.C., 3 failures on easy series (Neuras. or Depr.); O.A. less than Voc. and P.M. (Anx.), and low W.Sc. of 4 (Depr. or Sch.); D.Sp. and all performance tests low (Anx.). Subject was inhibited to such an extent that almost every answer had to be queried for further clarification; word-finding appeared to be difficult, resulting in impulsive blurting out of inadequate replies, followed by corrections and doubts, e.g. Inf. no. 11 (whale), "Fish. Or mammals. Or what? I think

it's mammals"; no. 16 (Mexico), "South America. That's wrong. I think it's South America, I'm not sure"; no. 17 (van Riebeeck), "1448. It's wrong. No, never mind. - 1665";P.A. no. 8 (crab), "The head and the tail. The head. No, it's the tail." Impaired attention was apparent in the subject's failure on 4 D.B. and successful repetition of the 5-series. There was some motor awkwardness and fumbling, the piecesin O.A. being fingered and then left; although the final assembly was recognised as a hand, the fingers were interchanged, or removed after being correctly placed, or placed in the most unlikely positions around the palm, so that nothing had been correctly assembled by the time limit of three minutes; the mannikin was described as "a bell-boy, not a girl", and the profile as "a head of a child." Not a single time credit was gained in B.D., although only design 7 was failed. Diagnosis: Anxiety.

Case A/2/3. Sim., high W.Sc. of 17, IQ not very superior (O-I or Par. C); D.Sp. 6 greater than Arith. (Sch.), and 2 greater than Voc. (Sch.); P.A. less than Voc., V.M. and P.M. (Sch.); O.A. greater than Voc. and P.M. (Sch.). Verbal IQ 13 higher than performance IQ. Extreme scatter of subtest scores, from 7 to 17. Sporadic absurd answers, even though corrected, e.g. A. A. Milne wrote "Jock of the Bushveld" - "but I think it's wrong." In Comp., subject was inclined to be moralistic in ques. 3 (bad company), "I don't think we should. (Prompt) Because it's unpleasant; one prefers more pleasant company", and ques. 8 (laws), "So that people will conform to the standards set by the State and, er - er - er, the individual is not yet capable of living in a community and conforming to it without a basis of laws." Occasional irrelevance, which did not detract from the correctness of the rest of the answers, was also apparent in this test, as in no. 6 (city land), "The cost of living is higher in the city, and land is limited"; no. 10 (deaf - talk), "Because they cannot hear other people talking and therefore have no tone sense and are not able to imitate." Unnecessary adjectives were sometimes inserted in Voc., e.g. join, "To unite two opposing things to form one"; fur, "The skin of a dead animal"; knuckle, "A movable joint"; belfry, "A tower in which there are bells - or sometimes bells." Subject claimed that if she heard a word in its context, or saw it written down, she would know it. The missing reflection in P.C. no. 13 was given as, "Only half a face." Fluctuations of rate of performance in D. Sym. was marked, varying from 5" to 14" for the reproduction of five symbols; incorrect symbols for both 2 and 5 persisted to the end of the test. Stories in P.A. lacked continuity and were, in the main, merely descriptive and without sequel. Although examples of peculiar

thought processes in this test were few and sporadic, they occurred throughout the test and were emphasised both by the scattergram and by the subject's education background (a university professional degree). Diagnosis: Schizoid Personality.

Case C/2/13. Inf., more than 2 failures on 1st degree of difficulty (Hyst. or Neuras.); Comp., 3 failures on 2nd degree of difficulty (Neuras. or impaired judgment); D.Sp. 6 greater than Arith. (Sch.), and 2 greater than Voc. (Sch.); Voc., 5 failures on 2nd degree of difficulty (Neuras. or Depr.); P.A. less than Voc., V.M. and P.M. (Sch.). Tendency throughout verbal subtests was to fail easy and pass more difficult items; pervasive inefficiency, in addition to these temporary inefficiencies, was evidenced by subject's withdrawal and complaints as soon as any subtest became more difficult; responses lacked variety and intensity, and towards the end subject was frankly bored, gazed out of the window whilst the P.A. cards were being put out and asked, "Is there much more?" Fatiguability and lack of concentration, particularly in Arith., were pronounced, each problem having to be repeated two or three times before she grasped what was required; eventually subject flatly refused to "do any more of these little things. I can't and I won't", and no persuasion could induce her to continue. In view of her lack of interest and co-operation, and of her numerous comments that she was "getting fed up now", that items were "very difficult", that she "couldn't be bothered to try", or that she "didn't want to do it", it was very difficult to understand why this subject volunteered to do the test. Diagnosis: Neurasthenia.

Case C/5/12. Arith. 6 below Voc. (Sch. or Depr.); D.Sp. 4 below Voc. (A & D); P.A. less than Voc. and V.M. (O-C, O-I or Par.C); O.A. less than Voc. and P.M. (Anx.); B.D. 5 below Voc. (Depr. or Neuras.); D.Sym. 4 below Voc. (Depr.). Subject smoked heavily through the test and frequently bit her fingers; temporary inefficiency showed in sporadic lapses where wrong answers were given to easy questions, and replies frequently trailed off without being finished, or were interspersed with "sort of", or "kind of", as though the subject experienced difficulty in selecting her words in spite of achieving a high score on Voc. In Comp., she usually reached the required answer, but in a roundabout way, as though her thoughts first had to be marshalled vocally before they could be clearly formulated. Concentration seemed to be impaired; the correct answer was usually given in Arith., but either after the time limit or after a prompt, no help being necessary, and this applied in P.C. as well. The last two Block Designs were failed, no. 7 having nothing correctly in

position at 3' 15", this being the time limit for completion. In D.Sym., the first figure is a 3, and this is followed by 1, 2, 1, 3, 2, 1, 4; the subject correctly reproduced the symbol for 3, then followed with the consecutive symbols for 4 to 9 before she realised her mistake, and thereafter put the appropriate symbols underneath the figures; this lapse alone reduced her performance IQ by one point. A further 3 points on performance W.Sc. were lost by her arrangement of cards in the beggar series of P.A., where the story was right but the arrangement was wrong, due to lack of attention to the detail in the cards which should serve as a guide to correct arrangement. Although these lapses are few, they indicate lack of attention and concentration and, together with the scattergram, assume some weight as accumulative evidence. Diagnosis: Anxiety.

Case A/4/23. Inf. 5 less than Comp. (Anx.), and more than 2 failures on 1st degree of difficulty (Hyst. or Neuras.); Arith. 5 less than Voc. (Sch. or Depr.); D.Sp. 7 less than Voc. (A & D); P.C., 2 failures on easy items (Neuras. or Depr.); O.A. less than Voc. and P.M. (Anx.); D.Sym. 6 less than Voc. (Depr.). This is a case where the scatter gram points to the presence of anxiety whereas there is very little qualitative support. At the time of testing, although the subject was going through a period of domestic difficulty, she appeared to be well controlled in the test situation, and signs of anxiety were apparent mainly in her "near misses" and her method of answering in the unsure form of a question, such as Inf. no. 8 (Macbeth), "Shakespeare, surely?"; no. 14 (Battle of Blood River), "Dingaan's Day - is it the 26th November?"; no. 17 (van Riebeeck), "16 ... 83 or so?"; and other replies followed by "Is it?" Contrary to her specialised training (nursing tutor sister), she failed to answer Comp. ques. 10 (deaf - talk), "There may be a lesion in the brain where both nerves arise." The last two Arith. problems were failed purely through lack of concentration; she worked these out respectively as 8 X 4 = 42, and failed to change yards to feet; the easier no. 6 was wrong because she multiplied instead of dividing, but in all cases a prompt of "Are you quite sure?" was sufficient to evoke the correct answer. The third assembly in O.A. was completed entirely in reverse after an initial anti-clockwise rotation of 45 degrees. One square was omitted in D.Sym. Her mean for the ten subtests was 10.3 W.Sc. units, and those tests which are primarily affected by anxiety, namely Inf., Arith., D.Sp., O.A. and D.Sym., were all below her own mean, the respective weighted scores being 8, 9, 7, 7 and 8. Diagnosis: Anxiety.

The individual cases analysed here for qualitative support of quantitative diagnostic signs comprised 11 males (6 of whom showed less than five such signs) and 9 females from the homosexual group, and 7 males and 6 females from the control group. There were in the control group, however, a further 1 male and 8 females who, by virtue of their scattergrams, would have lent themselves to similar analyses had their files been recorded in sufficient detail. The total number of individual cases in both groups having five or more quantitative indications of maladjustment is shown in Table XXXI, from which it will be seen that there were more possibly maladjusted cases in the "normal" than in the homosexual group.

It must be remembered that none of the subjects included in this survey is psychotic, although some may be more maladjusted or even more neurotic than others. All, however, are able to carry on their daily lives in an adequate manner. The findings on the individual cases mentioned above are in terms of personality and particular modes of adjustment. These efforts towards adjustment fall into two main types, namely schizoid and anxious. The first heading includes obsessive-compulsive and preschizophrenic individuals, who are still firmly in contact with reality and in whom there is no reason to anticipate any psychotic break or rapid deterioration, as well as individuals whose attempts at adjustment have a schizoid pattern which has become an integral part of their character make-up. The anxious group includes individuals who show symptoms not only of anxiety, but also of depression, hysteria and neurasthenia. It will be seen from Table XXXII that the males analysed above tend more towards the schizophrenic and the females towards the anxious groups, the proportion in each sex being two to one.

Personality Groups.

| Personality Group | Test Group | | | Control Group | | | Males | | | Females | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Test | Con-trol | Tot. | Test | Con | Tot |
| Schizoid | 7 | 3 | 10 | 5 | 2 | 7 | 7 | 5 | 12 | 3 | 2 | 5 |
| Anxious | 4 | 6 | 10 | 2 | 4 | 6 | 4 | 2 | 6 | 6 | 4 | 10 |

TABLE XXXII.

These individual findings are entirely in keeping with the group findings discussed, particularly when referred to the homosexual subjects.

## PART IV : SUMMARY AND CONCLUSIONS.

However homosexuality may have been defined or described, it is generally agreed that the phenomenon may occur in varying degrees in different individuals, or even in the same individual at different stages of his life. The number of people who are exclusively or even primarily homosexual throughout their entire lives has been estimated at from 1% to 4% of the population.

Homosexuality appears to have played a significant part in human sexual activity since the dawn of history; it has also been observed in both sexes of most mammals, and thus suggests a basic mammalian capacity for indulgence in all types of sexual behaviour which has been interpreted as an explanation for variations in human sexual behaviour. This argument is supported by the finding that homosexuality occurs in all human races and cultures throughout the world. In many societies, such activity is condoned and even encouraged, whereas in others specific social pressure is directed against it; but no matter how a particular society may treat homosexuality, it is very likely to occur in at least a few individuals.

Our own society forbids all homosexual behaviour and classifies it as unnatural, but it occurs nevertheless in all strata of society. It has been maintained that the legal penalty of imprisonment for homosexual activity has led to an increase in the crime of blackmail, and the Commission of enquiry into homosexuality and prostitution, at present sitting in England, has raised the pertinent question whether homosexuality should be regarded as a sin, or whether the law should be empowered to treat it in all cases as a crime. There are specific statutes against female homosexual activity in Austria, Greece, Finland and Switzerland, and in five of the United States of America, although in fact no conviction for female homosexuality in these States has been sustained for more than 50 years. Information on the incidence of homosexuality among females is sparse and based largely on supposition, but Kinsey's data support the general opinion that it is less prevalent than among males.

Fifty men and fifty women, not drawn from any institution, volunteered to take part in the present survey. The word homosexual is here defined as a person who acknowledges his homosexuality, whose sexual life is almost exclusively with a person of the same sex, and whose preference is for sexual relations with the same sex. The control subjects were drawn from the general population and matched individually with the test group

subjects for age, education and, as nearly as possible, type of occupation. The criterion for sexual "normality" was marriage which was taken to indicate a preference for sexual relations with the opposite sex.

Many theories concerning the ætiology of homosexuality have been put forward. The psychoanalytic school stresses the adverse effects on normal psychological development of any one or combination of such factors as mother fixation; identification or rivalry with the parent of opposite sex; the castration complex and penis envy or masculinity complex; regression to or fixation at an earlier libidinal level; emotional excesses, positive or negative, from a maladjusted upbringing; pre-Oedipal aggression and the oral trauma of weaning; and fear of the opposite sex caused by feelings of inferiority. Opinions on the value of psychotherapy in cases of homosexuality are divided.

Questions along the above lines had perforce to elicit from the present test group merely factual, conscious, and therefore largely superficial replies. Of the males, 28 subjects stated a preference for the mother, only four expressing their fondness in strong terms; this is contrary to general reports on the relationship between male homosexuals and their mothers. Of the females, 14 preferred the father; 12 men and 8 women expressed no preference, and 2 men and 2 women disliked both parents. (Table II, page 81.) Fear or active dislike of the opposite sex parent was expressed by 3 men and 6 women, and of the same sex parent by 6 men and 3 women. A difficult relationship with the same sex parent was expressed by 12 men and 15 women. Even when a preference for one parent might have been stated, the relationship between subject and parents was described in casual or indifferent terms by 35 men and 22 women. Thus indifference to, plus actual dislike of parents made up 61% of the group's responses in regard to parental relationship. If this early indifference or dislike may be considered as failure to identify with the parent, it appears to be more common than cross-parent fixation and may well prove to be an additional or parallel factor in the ætiology of emotional immaturity which is believed to be common to all homosexuals.

Defective family, and particularly parental, relationships may result in either positive or negative emotional excesses towards the child. Where there is a great discrepancy in ages between the parents or where the home is disrupted, unhappy or disturbing due to parental friction or incompatability, it is not unlikely that such conditions will influence the child. In the present test group there were 9 cases in which the father was from

13 to 38 years older than the mother (Table VII, page 89); in 45 cases the home was disrupted, 14 of these due to divorce, separation or desertion; 15 homes were unhappy, although not actually disrupted. Out of the 40 homes that were neither broken nor unhappy, there were 18 cases of a poor relationship between the subject and the same sex parent; 2 cases of poor relationship between the subject and opposite sex parent; 6 cases of mother dominance with a weak or absent father; 3 cases of indifference to or dislike of both parents; 4 cases with abnormalities in the family; 1 case of confused sexual self-identification; and 6 cases with nothing abnormal or unusual in the family or family relationships.

Thus the two outstanding features of this group were (a) subject-parent relationship one of indifference or dislike in 61% of cases; and (b) broken or unhappy homes in 60% of cases.

Another school maintains that human sexual behaviour is controlled and directed primarily by learning and experience, or individual or social conditioning, which may be caused by a number of factors including early dominance by one parent, experiences during adolescence, lack of sexual success or painful experience at puberty, segregation of the sexes, and homosexual seduction in early youth or childhood. Seduction and segregation at boarding schools did not appear to be of paramount importance in the present group. Only 6 males and 7 females were actually seduced; 25 males and 11 females had their first homosexual experience whilst they were still at school, and of these only 16 males and 6 females were at a boarding school at the time.

The majority of the older writers and many of the more modern ones believe that homosexuality is a congenital and often hereditary defect, or that the homosexual person has a constitutional predisposition which is brought to the surface by certain experiences. This may apply to the 7 men and 2 women who stated that although their introduction to overt homosexuality was in the nature of seduction, they were at the same time quite willing for the act to take place, or had always been aware of their inclinations before their initiation.

From the genetic viewpoint, Lang found the sex ratio of siblings of male homosexuals in Germany to deviate markedly from the normal proportion of 106 : 100 males : females, and suggested therefore that many of these cases were hereditarily determined and best explained by a genetic mechanism. This finding was not corroborated by Darke whose sample, however, was very much smaller. Kallmann's study of monozygotic male twins, who

revealed practically complete concordance as to overt homosexuality, suggests a genetically oriented "imbalance" theory, probably hormonal in nature. The numbers in the present study are too small for any conclusions to be drawn, but the siblings of the homosexual group were in the ratio of 105.04 : 100 males : females, and of the control group 93.14 : 100; a total of 721 files taken from the general English-speaking population of South Africa gave a ratio of 101.86 : 100. (Table III, page 83.)

This endocrine imbalance theory led to a great deal of research, with such conflicting results that no valid conclusions could be drawn from either the ætiologic or therapeutic points of view.

Krafft-Ebing's opinion that homosexuality was a sign of degeneration, and that homosexuals were primarily of degenerate stock, no longer holds sway, although some writers would place homosexual individuals among the psychopaths. Questions on family instability revealed that 21 subjects knew of no instability whatsoever in the family; in 27 cases there was only one family member who showed instability which varied from a mild suspected homosexuality to severe delinquency and/or psychosis. Ten subjects had more than three relatives who were in some way abnormal, and these ten subjects contributed a great proportion of the total numbers involved. Alcoholics, suicides, other homosexuals and institutionalised psychotics were the most commonly stated abnormalities (Table I, page 79), but it must be emphasised that there are no comparable figures for similar information from the control group. Some of these homosexuals, therefore, are from average, normal families with no known "taint" or instability, whereas others are from families which are highly unstable. From the results of the Wechsler-Bellevue test applied to this group, there emerged absolutely no supporting evidence of a homosexual psychopathic personality.

It would not be difficult to produce cases to support any one of the many theories on the ætiology of homosexuality. It would be extremely difficult, however, to select any one theory which would be applicable to all cases of homosexuality.

The question of a "homosexual personality" has been discussed at some length. Some writers, notably Greenspan and Campbell, Sessions Hodge and Norwood East, contend that the homosexual is an exclusive personality type, whereas others, represented by Krafft-Ebing, Kinsey et al and Smith, maintain that homosexuals comprise a heterogeneous group of personality types who, apart from their sexual lives, are not greatly different from normal persons. The latter statement is more applicable to the present test

group. The psychopathological phenomena and personality traits said to be common to homosexuals are a prevalence of schizoid or schizo-sexual disorganisation or withdrawal, obsessive features, anxiety, narcissism, instability in regard to both emotional relationships and employment, and artistic interests. Some of these characteristics were investigated in the present survey.

The group scattergram (Figure 4, page 169) of the homosexual males showed a pattern of inter-test related scores that is typical of schizoid normal subjects and of the preschizophrenic groups who rely on the pattern of "intellectualisation" for adjustment; the scattergram of the female homosexual group, on the other hand, was that of a generalised mild anxiety state. When individual tests were analysed, these sex trends remained the same (Table XXXII, page 217). By virtue of the legal and social penalties inflicted on male homosexuals, those who persist in such activities have literally to live "double lives", keeping up a certain facade of "normality" for the benefit of colleagues and society in general, and living their sex lives in secret. Normal women have the security of social approval, husband and probably children, giving them some further security for their old age; homosexual women, without any of these things, have no guarantee against loneliness, support in their old age, or, in many cases, prospects of financial security, and regard their future with some misgiving leading inevitably to a general anxiety.

There is nothing in the occupational record of the homosexual group to support the contention that they are any less stable than the heterosexuals as regards employment. Changes of job were usually for improvement, and only 9 males and 10 females could be described as "footloose", as against 8 males and 7 females in the control group. The average number of jobs, and the average period per job, were practically the same for both test and control groups. (Table XIV, page 112.)

With regard to stability in emotional relationships, there is no information available on the number of individuals in the heterosexual group who have engaged in extra-marital relations, or who would have remained with the same partner had there been no children or other social ties to consider. No comparison can therefore be made between the two groups in this respect. In the homosexual group, relationships with one partner have lasted from 5 to 30 years in the case of 22 males and 21 females. This is contrary to general belief. The mean duration of relationships is 6.25 years for the women and 4.8 years for the men; after five years, the mean durations become 11.2 years and 8.9 years respectively. Many of these long-

term relationships were still current at the time of testing. (Table XVII, page 118.) The women therefore appear to be slightly more stable than the men in their emotional relationships.

There seems to be no doubt whatsoever that the interests of the majority of the homosexual group lie primarily in the field of the arts. Of the control group, 80% of the males had active (masculine) interests, and 92% of the females had sedentary (feminine) interests. The majority of the test group, 68%, had mixed interests with the arts predominating, particularly music and the theatre. These differences in interests between the test and control groups were found to be highly significant for both sexes; positive associations were found between (a) active interests and the male control group, (b) sedentary interests (including the arts) and the male homosexual group, and (c) sedentary interests and the female control group; the relationship between active interests and the female homosexual group, although positive, should be regarded with more caution. (Tables XIV and XV, page 112.) In regard to occupation, the numbers of both groups employed in a business and/or clerical capacity were very similar; but whereas 31% of the balance of the homosexual group worked in some artistic field, as against only 3% of the control group, only 7% were employed in a technical capacity as compared with 23% of the control group. (Table XII, page 106.) Thus, both by interest and occupation, the group of homosexuals in this survey are more prominent than the control group in the artistic sphere.

In our society, homosexuals are usually thought of as individuals who present pronounced characteristics of the opposite sex. The concepts of masculinity and femininity, however, are very largely culturally determined and, furthermore, should not be regarded as unitary traits. Masculinity and femininity may be independent of the genetic sex of an individual, but are equated in sexual behaviour to dominance and passivity. In the present group, roughly half of the males (48%) invariably or by preference adopt the masculine or dominant rôle in their homosexual relationships, and 40% the feminine or passive rôle; of the women, the proportions are respectively 60% and 28%; the balance, 12% of each sex, express no preference. Thus within the homosexual group there are both men and women, who, irrespective of their genetic sex, are both active, dominant, aggressive or masculine, as well as passive, subordinate or feminine in their sexual behaviour. (Table XVI, page 114.)

From every aspect other than sexual behaviour, there are many homosexuals who remain as masculine or feminine as their heterosexual counter-

parts. In appearance it is generally agreed that there is nothing to distinguish the homosexual from the heterosexual; of the present group, only two men were obviously effeminate in dress, gestures and manner of speech, and five women were obviously masculine in appearance.

The main sex differences in the homosexual group emerged with reference to their first overt homosexual experiences; here, there were two striking differences. Firstly, the mean age at which the first overt homosexual contact was experienced was 16.9 years for the males as compared with 20.24 years for the females. Secondly, 70% of the males were in no way emotionally involved with their first homosexual partners, whereas 70% of the women were either in love with or emotionally attached to their first partners. These two differences, earlier commencement of sexual activity in the males and less emotional content in their sexual relationships, may, however, merely reflect a basic sex difference which is completely unrelated to homosexuality. (Table IX, page 97.)

Homosexuals are generally considered to be of average intelligence, or perhaps slightly above average, but this opinion has been based largely on speculation and on tests applied to prisoners and army personnel. The intelligence of 75 homosexual offenders in prison was found by Kahn to be slightly above that of the general non-homosexual prison population; Loeser found sexual psychopaths in military service to be more intelligent and capable than the average distribution of army personnel; Darke and Geil found 100 male homosexual prisoners to be of average intelligence (mean IQ 100.9) in relation to the general population. In the present survey, only the Wechsler-Bellevue test was used, and the homosexual group was compared with a carefully controlled group drawn from the normal population, age, education and occupation being kept constant. Both the male and female homosexuals had significantly higher mean IQs than the male and female control groups on verbal, performance and over-all results. The differences in the means of the over-all IQs were 5.10 and 6.96, both being highly significant at .005 and less than .001 levels, for the males and females respectively. (Table XXI, page 154.) The males in both groups had a significantly higher verbal IQ than the females, at the .03 and .04 levels respectively for the test and control groups. (Table XX, page 153.)

The homosexual has to cope with a perpetual conflict between his own sexual impulses and the forces of society; this conflict, in addition to many psychoanalytic theories previously mentioned, has led to the suggestion that all homosexuals are neurotic, although the more general opinion

appears to be that homosexuals are neurotic because of society's reaction to their homosexual activities. Whether neurosis is the cause or result of homosexuality is a moot point; whether in fact homosexuals are more neurotic than their heterosexual counterparts, and if so whether this neurosis takes any particular form, are questions that have received some attention.

Attempts have also been made to relate homosexuality to some of the psychoses. The persecutory schizophrenic psychoses of a paranoid type are believed to be in some way related to homosexuality; but, as overt homosexuals seldom become psychotic, it is more likely to be repression of homosexual tendencies which results in a psychotic break.

Prominent ætiological factors in the production of schizophrenia in childhood, with particular reference to parental attitudes, are often quoted as factors in the ætiology of homosexuality; but this cannot be accepted as evidence of any relationship between homosexuality and schizophrenia. Campbell emphatically denies any such relationship on the basis that when the schizoid personality becomes aware of latent homosexual desires, he may develop a transient psychosis known as homosexual panic which is a rebellion against homosexuality, whereas the true homosexual experiences no such reaction.

Freud has stated that in the unconscious psychic life of all neurotics there are, without exception, inversion and fixation of libido on persons of the same sex. Greenspan and Campbell, however, maintain that an invert is never a basically neurotic person. It seems possible that homosexuality may be an additional symptom of a neurotic personality, or the background upon which neurotic symptoms may manifest themselves. This argument is difficult to reconcile with homosexuality among primitive peoples where it may be tolerated, condoned or even encouraged. Neurotic symptoms said to be prevalent among homosexuals in our society are alcoholism and drug addiction, paranoia, hysteria, anxiety and depression.

Of the present group of homosexuals, 17% consider themselves to be heavy drinkers (not inebriates), one female stating that she is an alcoholic. No specific questions regarding the taking of drugs were asked, but two subjects stated that they took dexadrine or benzadrine, one had attempted suicide "several times" by sleeping tablets and had received psychiatric treatment, and one other had been successfully treated for drug addiction at an Institution. The proportion of alcoholics and drug addicts in the group is therefore very small, and these two symptoms could certainly not be considered prevalent or even common.

Organic disease as well as prolonged or frequent illness in childhood, which might be considered as hysteric symptoms, occurred in 18 of the homosexual histories; of these, the home was disrupted in 9 cases, in 8 other cases there was cross-parent preference, and the remaining subject was a menopausal child born 15 years after the previous sibling. A possible inference here is that these subjects were seeking security or emotional satisfaction and attention through the medium of illness. There were 12 subjects (nine being males) who suffered from asthma and/or hay fever, the most striking common feature in these histories being a home that was broken, unhappy or lacking in affection in 83.3% of the cases. Duodenal ulcer was, or had been, present in 8 cases (six males); of the five subjects who did not come from broken homes, all except one had been cured and this one was receiving treatment at the time of testing. Other stomach upsets were present in 10 subjects (seven females); the only subject in this group, a male, who did not come from a broken home had an overbearing, dominant and possessive mother. Migraine occurred in 11 subjects (eight females), and 10 others suffered from headaches. Ulcers, asthma and hay fever were more prevalent among the males, and migraine and stomach upsets among the females. Only 36 of the entire homosexual group stated that they were not subject to any ailment. (Table XIX, page 129.) Symptoms of some kind which might be interpreted as neurotic, including such things as dysphemia, sigmatism, tics, nail-biting, "nerves", insomnia, etc., occurred in 66% of the homosexual group. Psychiatric treatment had been received by six subjects, two for psychoneuroses, and only two directly because of their homosexuality; the other two were those previously mentioned in connection with drug addiction.

The high number of psychosomatic and psychoneurotic symptoms indicates that this group of homosexuals is probably more hysteric-neurotic than the general population as represented by the control group; but whereas some individuals may have been included under several headings, it must not be overlooked that 23 of the subjects showed no similar neurotic symptoms at all. Furthermore, no questions were put to the control subjects on this aspect of their lives. On the Wechsler-Bellevue individual scattergrams, there were more control than homosexual subjects who showed 5 or more quantitative signs of neurosis of maladjustment. (Table XXXI, page 194.)

Homosexual prostitutes and/or blackmailers, those who indulge in occasional homosexual acts as when inebriated, or for the sake of curiosity or experience or when satiated with heterosexual activity, and those who indulge only in exceptional circumstances such as prison or barracks, should

be considered pseudohomosexuals since such behaviour in these cases may be an accidental, incidental or experimental substitute for heterosexual behaviour. Any research on homosexuals should exclude such individuals, and an attempt has been made in this survey to use only subjects who are homosexual according to the definition previously set down. None of the 100 subjects would rate lower than 4 on Kinsey's scale; 86 subjects would rate 5 or 6, of whom 39 are exclusively homosexual. (Table X, page 101.)

The best of the published studies on homosexuality are based on the select population which is found within prisons, and current theories are therefore largely based on a group of possibly atypical cases who, together with clinical cases, are not necessarily representative of the homosexual population as a whole. The majority of studies deal only with male homosexuals, and there is an extreme paucity of data on female homosexuality.

The present study covers both men and women; all are non-institutionalised cases; they derive from a representative socio-economic cross-section of the community, 54% being from homes in the professional and otherwise upper strata of society, and 43% from the artisan or middle classes, the remaining 3% knowing nothing of their fathers' occupations; the majority of subjects have lived in urban areas up to and beyond the age of 18, but there are also included subjects with a primarily rural background (Table VI, page 88); they were drawn from most of the larger centres and some smaller centres in the Union of South Africa, some having originated from other Commonwealth or European countries; 44 of the cases had not proceeded beyond standard 9 in their scholastic career, 29 had matriculated, and 27 had further special qualifications, including 17 with a University degree (Table XI, page 102); 11 of the subjects were only children as compared with 10 of the control group, and 36 were youngest children as compared with 20 of the control group (Table V. page 86); average size of family was the same for the test and control groups as for a random South African population of 721 subjects, being 4.0, 4.49 and 3.99 respectively (Table IV, page 84); as far as can be stated with any certainty, this group of homosexuals is a representative cross-section of the general homosexual population.

Kallmann made a very apt comment when he said[1], "An investigation of the sexual habits and self-protective devices of an ostracised class of people and their family relations is not a promising field of exploration for research workers." The numbers involved in this particular survey are,

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[1]Kallmann, J. Ner. Ment. Dis., 1952, Op. Cit., p. 283.

for obvious reasons, very small and attempts should be made to extend the survey by greatly increasing the number of subjects. A parallel survey could be carried out, comparing a group of subjects from sources similar to those generally used for studies of this nature with a control group of matched normal subjects; this test group could be drawn from penal institutions, or could be made up of the type of person previously described as pseudohomosexual; such a sample, however, would probably be even more difficult to collect than most other population samples.

When sex differences in the normal population Wechsler-Bellevue results become available, these should be borne in mind when comparing male and female homosexuals, or the two sexes in any clinical or atypical groups.

Although the homosexual group under discussion is numerically small, four main findings emerged from this survey. These were:

(1) No single environmental factor was found to be common to all cases. The aetiology of homosexuality would therefore seem to remain a matter of conjecture, the most likely theory being that there is a basic universal potentiality among human beings for such behaviour which is brought to light in certain cases by different individual experiences.

(2) The homosexual males showed a tendency towards a schizoid adjustment, and the females towards a mild anxiety state. These trends should not be taken as symptoms of neuroses, but rather as personality characteristics indicating types of adjustment which have become integral parts of the character structure. No evidence was found in the homosexual group scattergrams of any trend towards a psychopathic personality.

(3) There were some individual subjects who were highly neurotic, but these were found in the control groups as well as in the test groups.

(4) The mean IQs of the homosexual groups were significantly higher than those of the control groups in this survey.

Further facts of interest, summarised below, stress the need for further research on the subject of homosexuality in non-institutionalised groups.

(1) Some psychosomatic and/or psychoneurotic symptoms were present in a large proportion of the homosexual subjects.

(2) Instability in the family was pronounced in only a few cases.

(3) Indifference to parents was more prevalent (on the subjects' conscious level) than cross-parent fixation.

(4) 60% of the subjects came from either disrupted or unhappy homes.

(5) Seduction was not a prominent factor in the case histories.

(6) The homosexual group was as stable as the control group in regard to employment.

(7) There was little support for the general contention that all homosexuals are emotionally unreliable and sexually promiscuous; 43% of the group had maintained a relationship with one partner for periods varying from 5 to 30 years. The females were slightly more stable in their relationships than the males.

(8) The homosexual group was more inclined than the control group to activities in the artistic sphere, both in interests and occupation.

(9) There was nothing in the appearance or build of 93% of these homosexuals to distinguish them from any normal group of people.

(10) The males had their first overt homosexual experience at an earlier age than the females.

(11) The males were less emotionally involved than the females in their first homosexual contact.

Many of these findings, notably numbers 3, 5, 6, 7 and 9 above, are contrary to popular belief and warrant further investigation.

APPENDIX A.

## SIGNIFICANCE OF DIFFERENCES BETWEEN SUBTEST MEANS.

### Male : Test Group.

| | Inf. | Comp. | Arith. | D.Sp. | Sim. | Voc. | P.A. | P.C. | O.A. | B.D. | D.Sym. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inf. | | 1.037 | 1.278 | 3.415* | 3.608* | 1.241 | 3.403* | 2.270⁎ | 5.950* | 1.703 | 4.165* |
| Comp. | 1.037 | | .627 | 4.301* | 2.662* | 2.311⁎ | 4.208* | 1.162 | 6.750* | .816 | 5.083* |
| Arith. | 1.278 | .627 | | 3.617* | 1.094 | 2.080⁎ | 3.657* | .036 | 5.611* | .033 | 4.137* |
| D.Sp. | 3.415* | 4.301* | 3.617* | | 6.334* | 2.421⁎ | .248 | 5.448* | 2.618* | 4.578* | .579 |
| Sim. | 3.608* | 2.662* | 1.094 | 6.334* | | 4.846* | 6.083* | 1.798 | 8.509* | 1.532 | 7.135* |
| Vocab. | 1.241 | 2.311⁎ | 2.080⁎ | 2.421⁎ | 4.846* | | 2.493⁎ | 3.679* | 5.082* | 2.807* | 3.152* |
| P.A. | 3.403* | 4.208* | 3.657* | .248 | 6.083* | 2.493⁎ | | 5.218* | 2.244⁎ | 4.502* | .288 |
| P.C. | 2.270⁎ | 1.162 | .036 | 5.448* | 1.798 | 3.679* | 5.218* | | 7.828* | .103 | 6.316* |
| O.A. | 5.950* | 6.750* | 5.611* | 2.618* | 8.509* | 5.082* | 2.244⁎ | 7.828* | | 6.855* | 2.130⁎ |
| B.D. | 1.703 | .816 | .033 | 4.578* | 1.532 | 2.807* | 4.502* | .103 | 6.855* | | 5.280* |
| D.Sym. | 4.165* | 5.083* | 4.137* | .579 | 7.135* | 3.152* | .288 | 6.316* | 2.130⁎ | 5.280* | |

*Significant at .01
⁎Significant at .02 - .05

### Male : Control Group.

| | Inf. | Comp. | Arith. | D.Sp. | Sim. | Voc. | P.A. | P.C. | O.A. | B.D. | D.Sym. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inf. | | .642 | 0. | 3.749* | 3.125* | 2.238⁎ | 2.251⁎ | 1.564 | 4.823* | .926 | 6.416* |
| Comp. | .642 | | .435 | 3.251* | 3.705* | 1.640 | 1.734 | 2.234⁎ | 4.269* | 1.525 | 5.810* |
| Arith. | 0. | .435 | | 2.882* | 2.216⁎ | 1.580 | 1.701 | 1.029 | 3.548* | .650 | 4.539* |
| D.Sp. | 3.749* | 3.251* | 2.882* | | 6.028* | 1.803 | 1.377 | 5.031* | .546 | 4.330* | 1.511 |
| Sim. | 3.125* | 3.705* | 2.216⁎ | 6.028* | | 4.992* | 4.694* | 1.844 | 7.229* | 2.098⁎ | 8.856* |
| Vocab. | 2.238⁎ | 1.640 | 1.580 | 1.803 | 4.992* | | .300 | 3.769* | 2.609* | 2.976* | 3.907* |
| P.A. | 2.251⁎ | 1.734 | 1.701 | 1.377 | 4.694* | .300 | | 3.548* | 1.960⁎ | 2.912* | 3.139* |
| P.C. | 1.564 | 2.234⁎ | 1.029 | 5.031* | 1.844 | 3.769* | 3.548* | | 6.307* | .484 | 8.125* |
| O.A. | 4.823* | 4.269* | 3.548* | .546 | 7.229* | 2.609* | 1.960⁎ | 6.307* | | 5.394* | 1.025 |
| B.D. | .926 | 1.525 | .650 | 4.330* | 2.098⁎ | 2.976* | 2.912* | .484 | 5.394* | | 6.922* |
| D.Sym. | 6.416* | 5.810* | 4.539* | 1.511 | 8.856* | 3.907* | 3.139* | 8.125* | 1.025 | 6.922* | |

*Significant at .01
⁎Significant at .02 - .05

APPENDIX A (Cont.)

## SIGNIFICANCE OF DIFFERENCES BETWEEN SUBTEST MEANS.

### Female : Test Group.

| | Inf. | Comp. | Arith. | D.Sp. | Sim. | Voc. | P.A. | P.C. | O.A. | B.D. | D.Sym. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inf. | | 4.239* | .759 | 2.988* | 6.717* | .581 | 1.334 | 3.899* | 4.032* | .684 | 1.136 |
| Comp. | 4.239* | | 3.952* | 6.592* | 3.389* | 3.397* | 5.038* | .505 | 8.079* | 2.812* | 5.010* |
| Arith. | .759 | 3.952* | | 1.819 | 6.016* | 1.201 | .397 | 3.683* | 2.579⁎ | 1.253 | .204 |
| D.Sp. | 2.988* | 6.592* | 1.819 | | 8.532* | 3.398* | 1.564 | 6.342* | .704 | 3.289* | 1.825 |
| Sim. | 6.717* | 3.389* | 6.016* | 8.532* | | 5.908* | 7.196* | 3.876* | 9.943* | 5.172* | 7.234* |
| Vocab. | .581 | 3.397* | 1.201 | 3.398* | 5.908* | | 1.808 | 2.873* | 4.436* | .156 | 1.633 |
| P.A. | 1.334 | 5.038* | .397 | 1.564 | 7.196* | 1.808 | | 4.753* | 2.394⁎ | 1.808 | .225 |
| P.C. | 3.899* | .505 | 3.683* | 6.342* | 3.876* | 2.873* | 4.753* | | 7.836* | 2.496⁎ | 4.714* |
| O.A. | 4.032* | 8.079* | 2.579⁎ | .704 | 9.943* | 4.436* | 2.394⁎ | 7.836* | | 4.218* | 2.703* |
| B.D. | .684 | 2.812* | 1.253 | 3.289* | 5.172* | .156 | 1.808 | 2.496⁎ | 4.218* | | 1.643 |
| D.Sym. | 1.136 | 5.010* | .204 | 1.825 | 7.234* | 1.633 | .225 | 4.714* | 2.703* | 1.643 | |

*Significant at .01
⁎Significant at .02 - .05

### Female : Control Group.

| | Inf. | Comp. | Arith. | D.Sp. | Sim. | Voc. | P.A. | P.C. | O.A. | B.D. | D.Sym. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inf. | | .998 | 1.406 | 2.753* | 4.431* | 5.905* | 1.988⁎ | 2.709* | 2.585* | 1.310 | 2.869* |
| Comp. | .998 | | 2.399⁎ | 3.966* | 3.809* | 1.586 | 2.947* | 1.865 | 3.851* | .417 | 4.188* |
| Arith. | 1.406 | 2.399⁎ | | 1.119 | 5.434* | .815 | .619 | 3.954* | .903 | 2.604* | 1.135 |
| D.Sp. | 2.753* | 3.966* | 1.119 | | 7.052* | 2.056⁎ | .396 | 5.716* | .277 | 4.059* | .040 |
| Sim. | 4.431* | 3.809* | 5.434* | 7.052* | | 4.835* | 5.786* | 2.258⁎ | 7.046* | 3.180* | 4.038* |
| Vocab. | 5.905* | 1.586 | .815 | 2.056⁎ | 4.835* | | 1.414 | 3.223* | 1.865 | 1.848 | 2.124⁎ |
| P.A. | 1.988⁎ | 2.947* | .619 | .396 | 5.786* | 1.414 | | 4.405* | .170 | 3.119* | .378 |
| P.C. | 2.709* | 1.865 | 3.954* | 5.716* | 2.258⁎ | 3.223* | 4.405* | | 5.689* | 1.272 | 6.071* |
| O.A. | 2.585* | 3.851* | .903 | .277 | 7.046* | 1.865 | .170 | 5.689* | | 3.944* | .252 |
| B.D. | 1.310 | .417 | 2.604* | 4.059* | 3.180* | 1.848 | 3.119* | 1.272 | 3.944* | | 4.250* |
| D.Sym. | 2.869* | 4.188* | 1.135 | .040 | 4.038* | 2.124⁎ | .378 | 6.071* | .252 | 4.250* | |

*Significant at .01
⁎Significant at .02 - .05

APPENDIX A (Cont.)

SIGNIFICANCE OF DIFFERENCES BETWEEN MEANS.

Verbal Subtest Means and Modified Verbal Mean.

| | Inf. | Comp. | Sim. | Vocab. |
|---|---|---|---|---|
| MALE : Test Group | 1.115 | .179 | 3.679* | 2.752* |
| Control Group | 1.879 | .864 | 3.930* | 2.932* |
| FEMALE : Test Group | 3.564* | 1.276 | 5.264* | 2.701* |
| Control Group | 1.561 | .406 | 4.356* | 2.300⁎ |

*Significant at .01
⁎Significant at .02 - .05

Performance Subtest Means and Modified Performance Mean.

| | P.A. | P.C. | O.A. | B.D. | D.Sym. |
|---|---|---|---|---|---|
| MALE : Test Group | 1.402 | 4.625* | 4.357* | 4.099* | 1.842 |
| Control Group | .192 | 4.302* | 2.858* | 3.534* | 4.314* |
| FEMALE : Test Group | .882 | 4.768* | 3.994* | 1.390 | .624 |
| Control Group | 1.661 | 4.175* | 2.129⁎ | 2.464⁎ | 2.438⁎ |

*Significant at .01
⁎Significant at .02 - .05

APPENDIX B.

Wechsler-Bellevue Subtests: Items Grouped According to Degree of Difficulty.

| Degree of Difficulty. | 1. VOCABULARY. |
|---|---|
| 1st. | Apple, donkey, join, diamond, nuisance, fur, cushion, knuckle, gamble, bacon, nail, microscope. (12) |
| 2nd. | Tint, fable, brim, guillotine, cedar, plural, hara-kiri, recede, secluded. (9) |
| 3rd. | Armoury, nitroglycerine, espionage, ballast, belfry, imminent, affliction, pewter, mantis. (9) |
| 4th. | Vesper, catacomb, spangle, chattel, stanza, flout, dilatory, proselyte, aseptic, amanuensis, moiety, traduce.(12) |
| | 2. GENERAL COMPREHENSION. |
| 1st. | 1. What is the thing to do if you find an envelope in the street, that is sealed, addressed and has a new stamp on it? |
| | 2. What should you do if, while sitting in the cinema, you were the first person to discover a fire? |
| | 3. Why should we keep away from bad company? |
| | 4. Why should people pay taxes? |
| | 5. Why are shoes made of leather? |
| | 6. Why are laws necessary? |
| 2nd. | 1. Why does land in a city cost more than land in the country? |
| | 2. Why must a motor vehicle be licensed before it may be driven? |
| | 3. Why must a person who wishes to travel outside his own country obtain a passport? |
| | 4. Why are people who are born deaf usually unable to talk? |
| | 3. GENERAL INFORMATION. |
| 1st. | 1. Who was the Prime Minister of the Union of South Africa before the present one, ... ? (Whoever it might be.) |
| | 2. Where is London? |
| | 3. What is a thermometer? |
| | 4. What does rubber come from? |
| | 5. What does the heart do? What is the function of the heart? |
| | 6. What is the capital of Italy? |
| | 7. How many weeks are there in a year? |
| | 8. Who wrote "Hamlet"? |
| | 9. What is the Vatican? |
| 2nd. | 1. Where is Brazil? |
| | 2. To what class of animal does the whale belong? |

Degree of Difficulty.

2nd (Cont.)

3. How many pints are there in a quart?

4. What is the capital of the United States of America?

5. On which day was the Battle of Blood River fought?

6. What is the Koran?

7. When did van Riebeeck land in South Africa?

8 How far is it from Cape Town to London, approximately, by sea?

3rd.

1. Where is Mexico?

2. Who invented the steam engine, i.e. the locomotive?

3. Who wrote "Jock of the Bushveld"?

4. What is the total population of the Union of South Africa, approximately?

5. Who wrote "Faust"?

6. What is the Apocrypha?

7. What is a Habeas Corpus?

What is ethnology?

4. SIMILARITIES.

1st. Orange and banana; coat and dress; wagon and bicycle; daily paper and radio; petrol and steam.

2nd. Dog and lion; air and water; eye and ear; egg and seed.

3rd. Poem and statue; praise and punishment; fly and tree.

5. ARITHMETIC.

1st.

1. How much is four shillings and six shillings?

2. If a man buys six shillings worth of clothing and gives the shop assistant ten shillings, how much change should he get back?

3. If a man buys eightpence worth of stamps and gives the clerk a two-shilling piece, how much change should he get back?

4. You have to share 36 oranges between 4 children. How many oranges does each child get?

2nd.

1. If 7 lbs. of sugar cost 2/6d, how many pounds can you get for 10/-?

2. How many hours will it take a man to walk 24 miles at the rate of 3 miles per hour?

3. If a man buys 7 tickey stamps and gives the clerk a half-a-crown, how much change should he get?

3rd.

1. A man bought a second-hand car for two-thirds of what it had cost new. He paid £400 for it. How much had it cost new?

2. Eight men can finish a job in six days. How many men will be needed to finish it in half a day?

3. If a train goes 150 yards in 10 seconds, how many feet can it go in one-fifth of a second?

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