

Heterosexual Aversion in Homosexual Males

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INTRODUCTION

Psychotherapists tend to view homosexuality as a neurosis or as a neurotic symptom (Sadger, 1909, 1921; Klein, 1932; Rado, 1940; Ellis, 1952, 1955; Bieber *et al.*, 1962; Ovesey *et al.*, 1963). In support of this viewpoint, several authors have observed that the frequency of typical neurotic phenomena in homosexual males is much higher than that in a heterosexual male population, and have concluded that homosexuality is one of the neurotic symptoms of their patients (Stekel, 1929; Henry, 1937; Ellis, 1959; Musaph, 1960; Doidge and Holtzman, 1960). However, an alternative interpretation is that such maladaptive patterns develop from the difficult situation of a homosexual male in a heterosexual society and from the general disapproval he encounters. Moreover, the finding of increased prevalence of neurotic symptoms in homosexual males has itself been challenged by Kronfeld (1923) and Hooker (1957), who pointed out that the investigated homosexual males represented a selection of people who sought psychiatric help. Hooker studied non-patient samples from homosexuals' clubs and did not find an abnormally high frequency of neurotic symptoms.

None of the authors who view homosexuality as being a neurosis specifies the empirical outcome of this neurotic process, that is, whether an aversion to the female physique ensues or whether the usual erotic value of the female physique is only neutralized. Nonetheless, the hypothesis that homosexuality in males is a neurosis would be supported if it could be shown either that (1) homosexual males react to females aversively and that heterosexual males do not show any aversive reaction to the male physique, or that (2) both homosexual males and heterosexual males show an aversive reaction to the physique of the non-preferred

sex, but that the aversive reaction of the homosexual males is substantially stronger.

The present study was undertaken in order to assess (a) to what degree the female physique is sexually arousing to homosexual males, (b) if the female physique is aversive to homosexual males and (c) whether there are any differences between the patterns of erotic reactions of homosexual and heterosexual males to the physique of the non-preferred sex.

Part One

In Part One of the study the relative erotic value of males and females for homosexual males was examined, and patterns of erotic reactions of heterosexual and homosexual males were compared.

METHOD

Subjects: The group of homosexual males was composed of 36 paid volunteers who indicated they preferred sex partners between 20 and 30 years of age. The age range of the homosexual subjects was 21 to 43 years, with a mean age of 26.9 years. They were recruited from three homosexuals' clubs in Toronto. Four additional volunteers did not complete the test, and five additional club members were excluded because two barely reacted at all to the pictures and three reacted indiscriminately to all of them (the description of the relevant criteria for exclusion of subjects was given in Freund *et al.*, 1972).

The control group was composed of 18 university students and 18 recent immigrants, all of them serving as paid volunteers. Their age range was from 21 to 39 years, with a mean age of 24.7 years. They were recruited from a students' placement service and an English school for recent immigrants. Two additional subjects were excluded because they did not complete the test, and another because his test result indicated homosexuality. The control group was basically that used in Freund *et al.* (1972). Four further persons, two students and two recent immigrants, were excluded in order to equalize the number of homosexual and heterosexual subjects for analysis.

Apparatus: The phallometer, used in previous investigations, was employed to measure penile volume. For a detailed description see Freund (1965a) and Freund *et al.* (1965). Colour pictures of nude persons were used as stimuli. There were four age categories of each sex, and each category was represented by six pictures. The age ranges and means of the photographic subjects are given in Table I.

Procedure: The phallometric test of erotic preference (Freund, 1957; 1971) was used. Sexual reactions in the form of penile volume changes ('responses') to potentially erotic stimuli were measured during two sessions. In one, slides were shown of photographic subjects (approaching the camera and smiling); in the other, short movie films were shown. At each session the test series was preceded by four practice slides or movies. The order of presentation of slides and movies was counter-balanced. The slides were exposed for ten seconds each and phallometric readings were taken at the start of each presentation and twenty seconds later. For the movies the corresponding intervals were 14 and 28 seconds. The difference between these two measurements was assessed for each presentation of a picture.

A slide or movie was projected only after the volume had returned approximately to its initial value. If this did not happen within approximately one minute, one or more colour slides of landscapes were shown, and if that did not work a neutral text was projected on the screen and the subject requested to read it aloud. After that, one or more further landscape slides were shown before exposing the next picture. This next picture was shown at the moment the volume slowly approached the 'zero' value from the negative part of the scale. However when a real erection occurred, the volume did not always revert fully to its initial value and a somewhat higher 'zero point' had to be chosen.

RESULTS

Comparison of homosexual and heterosexual males

The results of analysis of variance and the Newman-Keuls test (Winer, 1962, p. 80) on raw scores showed no significant difference ($P > .05$) between the androphilic males and the heterosexual controls in overall response.*

Examination of the significant Group \times Sex \times Age interaction showed the homosexual and heterosexual groups did not differ in their responses to each of the age categories of the non-preferred sex. With the exception of the responses to 8- to 11-year-old children ($P < .01$), the two groups also showed comparable responses (no significant differences) to the various age categories of the preferred sex (Fig. 1). The homosexual males responded less to the 9- to 11-year-old boys than the heterosexual males responded to the 8- to 11-year-old girls.

The same analyses were carried out in terms of standard scores, which were derived for each subject separately. The results were the same, with the exception that the response of the homosexual males to adult males was relatively smaller than that of heterosexual males to adult females ($P < .01$).

Comparison of responses to the various sex-age categories within each of the homosexual and heterosexual groups

Since there are always large individual differences in physiological measures ipsative

* The Tables of results for analysis of variance in Part One may be obtained upon request, from the authors.

TABLE I
Stimulus materials: age ranges and mean ages of photographic subjects

Age groups	Female			Male		
	Age range		Mean age	Age range		Mean age
	Yrs/months	Yrs/months		Yrs/months	Yrs/months	
1	5/7	8/3	6/6	5/4	7/7	6/7
2	8/4	11/5	9/6	8/8	11/0	9/7
3	12/0	14/0	12/8	12/0	14/8	13/6
4	22/9	26/3	23/2	19/0	25/8	22/5

Each sex-age group was represented by six photographic subjects. Each photographic subject was shown once on a slide and once on a movie strip.

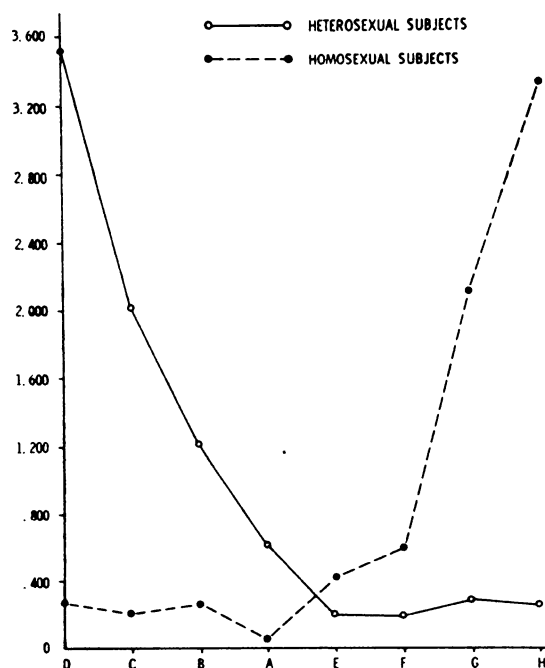


FIG. 1.—Penile responses of homosexual and heterosexual males to pictures of females and males of various ages.

Key: D—adult females, C—pubescent girls, B—8- to 11-year-old girls, A—6- to 8-year-old girls, E—6- to 8-year-old boys, F—9- to 11-year-old boys, G—pubescent boys, H—adult males.

measures are more satisfactory, and therefore only z-scores (derived for each subject separately) will be presented for within-groups comparisons. For the homosexual group, responses to adult males were significantly ($P < .01$) larger than those to pubescent males, which in turn were significantly ($P < .01$) larger than those to 9- to 11-year-old boys. However, there was no significant difference between responses to 9- to 11-year-old boys and those to 5- to 8-year-old boys. The response to 9- to 11-year-old boys were significantly larger than those to each age category of females ($P < .01$ for 6- to 8-year-old and pubescent females, and $P < .05$ for 8- to 11-year-old and adult females). The responses to 6- to 8-year-old boys were significantly ($P < .01$) larger than those to 6- to 8-year-old and pubescent girls, but they were not different from those to 8- to 11-year-old

and adult females. The responses to the various age groups of females were not distinct from each other.*

For the heterosexual group, the age categories of females were all distinct ($P < .01$), and even the 6- to 8-year-old girls elicited significantly higher responses than any slides of males ($P < .01$ except for pubescent boys: $P < .05$). There were no significant differences between responses to the various age categories of males.

Part Two

The results of Part One indicated that responses to different age categories of the non-preferred sex were not discriminable for either group. This can mean three things: (1) the subjects were reacting erotically to the non-preferred sex even if the age groups were not discriminable, or (2) the reactions to the non-preferred sex are not sexual reactions at all, or (3) these reactions represent some degree of aversion. The main question posed in part Two of the study was whether the response to the non-preferred sex was distinct from that to sexually neutral stimulus configurations.

METHOD

Subjects: The group of homosexual subjects consisted of 32 males who indicated a preferred partner age between 20 and 30 years. The age range of the homosexual subjects was 21 to 66 years, with a mean age of 27.9 years. They were paid volunteers recruited from the same clubs as the subjects in Part One. Eight additional volunteers were excluded because four reacted barely at all, two reacted indiscriminately to each of the pictures, and two further volunteers did not complete the test.

The heterosexual group consisted of 16 university students and 16 recent immigrants, within an age range of 21 to 31 years and a mean age of 24 years. They were recruited from the same agencies as the heterosexual subjects in Part One. One additional subject was excluded because of a clearly homosexual preference in terms of the test outcome, a further subject was excluded because of a negative mean of

* In a previously tested sample of androphilic males, who however were patients, the reactions to the female child were significantly smaller than those to adult females (Freund, 1967).

reactions (in terms of standard scores) to the adult female, and five additional subjects were excluded because they barely reacted at all to the pictures. The heterosexual group was identical with that used in a previous study mentioned above (Freund *et al.*, 1972).

Procedure: The procedure was the same as in Part One, with the following exceptions: each subject had only one session and only slides were shown. The slides were those used in Part One of the study, but the youngest age category for both sexes was replaced by twelve colour slides of landscapes.

RESULTS

The analysis of variance for raw data showed that there was no difference between the two groups in overall response ($F = 1.49$; $df = 1,62$). However, there was a significant stimulus category effect ($F = 23.58$; $df = 6,2996$; $P < .001$) and a significant group by stimulus category interaction ($F = 77.99$; $df = 6,2996$; $P < .001$). The latter two effects appeared also in the analysis carried out in terms of z-scores. The result of the Newman-Keuls test for group by stimulus category interaction showed that, for both groups, there were no significant ($P > .05$) differences between responses to neutral slides and those to the non-preferred sex. This was true for raw scores as well as for z-scores.

As in Part One, for within-groups comparisons only z-scores will be presented. With the group of homosexual males, responses to the adult males were significantly larger than those to the pubescent boys ($P < .01$), which in turn were significantly larger than the responses to 9- to 11-year-old boys and to neutral slides. The responses to 9- to 11-year-old boys were not significantly different from responses to neutral slides and from those to pubescent and adult females, but they were larger than the responses to 8- to 11-year-old females. This latter result was only marginally significant at the .05 level and should be accepted with caution.

Responses of heterosexual males to the various age categories of females were all significantly different from each other ($P < .01$), from responses to neutral slides and from those to the non-preferred sex. The heterosexual males responded most to adult females, less to younger females and least to neutral slides and males.

Part Three

Part Two showed that reactions to neutral stimuli and to slides of the non-preferred sex were not distinguishable for either subject group. However, it is possible that a 'floor effect' accounts for these results. Since the responses to these stimuli were assessed at a baseline of minimal sexual arousal, an aversive reaction, i.e. penile detumescence, may not be discernible. Therefore in Part Three of this study, responses to potentially aversive stimuli were assessed after the subjects had been prearoused to a criterion level of penile tumescence.

METHOD

Subjects: The group of homosexual subjects was composed of 20 paid volunteers who indicated a preferred partner age between 20 and 30 years. Their age range was within 20 and 53 years, with a mean age of 30.8 years. They were recruited from two of the three homosexuals' clubs mentioned above. Four additional homosexual subjects had to be excluded because they were not prearoused to the criterion level (see below), and one further subject was excluded because he reacted too much to the prearousal slides (see below).

The heterosexual group was composed of 20 students within an age range of 20 and 31 years, and a mean age of 22.7 years. They were paid volunteers recruited from the student placement service mentioned above. Seven additional subjects had to be excluded because it was not possible to induce a sufficiently high prearousal level.

Procedure: Each subject had only one test session. There were five categories of stimuli, each represented by six slides: (1) mature persons of the non-preferred sex, (2) pubescent persons of the non-preferred sex (these two groups of slides were identical with those in Part One and Part Two), (3) colour photographs of landscapes, (4) white line drawings on a black background of 'female sex symbols', a cup and saucer, a house, a pitcher, a pail, a bowl, a rowboat, and (5) colour pictures from a dermatological text book of skin conditions which appeared mildly disgusting. Each of these 'stimulus' slides was preceded by black-white photographs of persons of the preferred sex (the 'prearousal' slides). The test series was preceded by five practice runs.

Each 'prearousal' slide of a person of the preferred sex was shown at first for approximately one second. The exposure was either prolonged or further slides of the same category shown, depending on the subject's reaction. This procedure was aimed at

attaining a slow volume increase to a level of 2 ml. At this level the potentially 'arousal extinguishing' slide was shown. Two seconds later the first reading was taken. However, if at this time the volume either exceeded the 3 ml. level or had ceased to further increase, the trial was discarded and was repeated after the whole test series was completed. This happened with approximately 20 per cent of the subjects, but in most of these cases only one trial had to be repeated. The 'arousal extinguishing' slide was shown for fourteen seconds and the second reading was taken six seconds thereafter. Penile volume differences between first reading and second reading were assessed for each trial. After the second reading was taken the subject was asked to rate the impact of the 'arousal extinguishing' slide on a four point scale: 1—not at all disgusted, 2—mildly disgusted, 3—quite disgusted and 4—very disgusted.

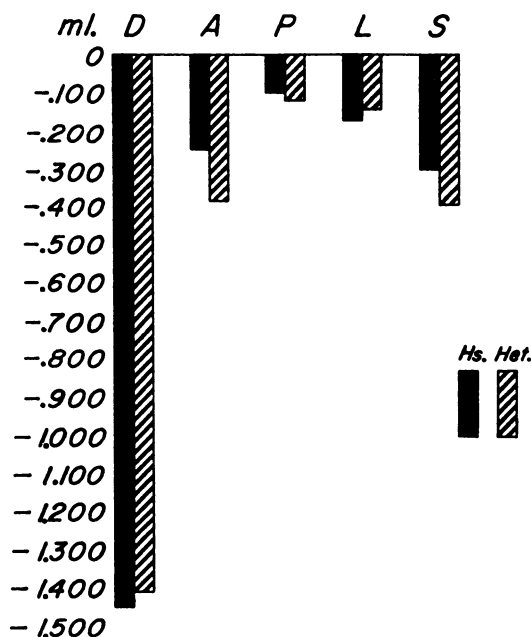


FIG. 2.—Detumescence responses of homosexual males and heterosexual controls.

Key: ml—millilitres, D—dermatological pictures, A—pictures of adult persons of the non-preferred sex, P—pictures of pubescent persons of the non-preferred sex, L—pictures of landscapes, S—white drawings on black background, Hs—homosexual males, Het—heterosexual controls.

RESULTS

With regard to the physiological measure there were no significant ($P > .05$) differences

between homosexual and heterosexual subjects and there was no significant interaction of these groups with stimulus categories. This indicates that both groups responded in the same way to the slides. There was a significant stimulus category effect ($F = 34.64$ for raw data, and $F = 49.57$ for z-scores, $df = 4, 1152$, $P < .001$). The Newman-Keuls test showed that this effect was mainly attributable to the disgust slides. The slides of the non-preferred sex, the neutrals (black and white drawings and coloured landscapes) were all significantly different from the disgust slides ($P < .01$) but they were not significantly different from each other.

The analysis of variance on verbal ratings of the various stimulus categories showed that there was no group effect, but there was a significant stimulus category effect ($F = 521.86$, $df = 4, 1152$, $P < .001$) and group by category interaction ($F = 5.08$, $df = 4, 1152$, $P < .01$).

An examination of the means in the group by stimulus category interaction showed that the heterosexual males found the dermatological pictures (mean rating 2.93) close to 'quite disgusting' and significantly ($P < .01$) more disgusting than the pictures of males (mean rating 1.28), which in turn were found more disgusting ($P < .01$) than neutrals (mean rating 1.03).

The homosexual males rated the dermatological pictures as more disgusting (mean rating 2.57) than any other category of slides ($P < .01$), but the ratings of females (mean rating 1.09) were not significantly different ($P > .05$) from those of the neutrals (mean rating 1.01).

DISCUSSION

For both homosexual and heterosexual males, penile volume responses to pictures of the non-preferred sex were not different from responses to emotionally bland and sexually neutral material, and there was no aversive response to the non-preferred sex. In verbal ratings, the heterosexual subjects expressed some disgust for pictures of the non-preferred sex, whereas the homosexual males did not, and there was no significant difference between the latter's ratings

of the neutral pictures and those of the non-preferred sex.

The currently prevalent belief that homosexuality in general is a neurosis may have led many a clinician to expect that the visual impact of a nude female (arousing for heterosexual males) will be aversive for homosexual males. The results of the present study do not support this expectation.

It may be argued that heterosexual aversion would have been detected had slides been shown of the fully exposed vulva. This argument is to be expected because of the wide acceptance of M. Klein's (1932) view that the homosexual male's evasion of the female as a sexual partner is based on his subconsciously conceiving of the vagina as a dangerous oral organ, a 'vagina dentata'. It is, however, to be expected that such an aversion, which is potent enough to inhibit sexual approach, should have been manifest for the female physique generally.

The homosexual subjects in this study were androphilic, i.e. they erotically preferred mature partners. It is even less likely that the hypothesis of homosexual neurosis would be supported had ephebophilic males, i.e. homosexual males who prefer pubescent partners, been used in place of androphilic males. Previous studies (Freund, 1960; 1965b, pp. 85-88) had shown that there is much less reason to expect ephebophilic males to be aversive against females. In a questionnaire administered to 222 homosexual males, the ephebophilic males indicated significantly ($P < .01$) more often than the androphilic males that at some time they had tried to observe females in the nude, that at some time they had felt erotically aroused by the sight of females, that at some time they had attempted heterosexual intercourse, and that at least once in their lives they had been in love with a female.

From clinical experience we gained the impression that disgust reactions may sometimes ensue from erotic interaction with the non-preferred sex, and this pertains to homosexual as well as heterosexual persons. However, very often no real aversion has been reported by homosexual males who have had, or habitually have, heterosexual intercourse. They usually state only that they do not feel sexually satisfied with females.

SUMMARY

Penile volume reactions of homosexual and heterosexual males were compared, using slides of nudes of both sexes at various ages and slides of bland sexually neutral pictures. With the exception of the larger responses of the heterosexual controls to children of their preferred sex, the responses of the two groups to the various sex-age categories were comparable (no significant differences). With both groups, the responses to the various age categories of the non-preferred sex were indiscriminable from those to the neutral pictures.

In a further experiment, six stimulus categories of slides were exposed: (1) pictures of skin afflictions from a dermatological textbook, (2 and 3) two categories of neutral slides, (4) nude pubescents, and (5) nude adults of the non-preferred sex. Before exposure of these slides, subjects were prearoused with slides of adult nudes of their preferred sex.

With both groups the pictures of skin afflictions produced significantly more penile detumescence than the remaining stimulus categories. Pictures of persons of the non-preferred sex and the neutral slides were not significantly different.

The heterosexual controls rated the pictures of skin conditions as more disgusting than those of males, and the latter in turn as more disgusting than neutral pictures. The homosexual males rated the skin afflictions as more disgusting than all the other pictures, but there was no significant difference in their verbal rating of female pictures and neutral slides.

The studies did not support the hypothesis that homosexuality is a neurotic symptom.

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