Heterosexuality, Homosexuality, and Erotic Age Preference

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Heterosexual and homosexual males who erotically preferred physically mature partners were compared with respect to the erotic impact of the nonpreferred age groups (of the preferred gender) and the nonpreferred gender. Erotic impact was assessed by phallometric test of erotic gender and age preferences. This measures penile volume changes during the presentation of potentially erotic stimuli. Homosexual males who preferred physically mature partners responded no more to male children than heterosexual males who preferred physically mature partners responded to female children. Although heterosexual males showed a (slight) erotic aversion to the male stimuli, and homosexual males did not show an aversion to the female stimuli, this difference was minimal.

KEY WORDS: penile responses, homosexuality, heterosexuality, age preference

(I) The Erotic Impact of the Nonpreferred Age Group of the Preferred Gender

An earlier study assessed the incidence of male sex offenders against female children vs. such offenders against male children (Freund, Heasman, Racansky, & Glancy, 1984). Approximately one-third of these individuals had victimized boys and two-thirds had victimized girls. This finding is consistent with the proportions reported in two earlier studies (Gebhard, Gagnon, Pomeroy, & Christenson, 1965; Mohr, Turner, & Jerry, 1974). Also, in a recent literature search (Cameron, 1985) which examined 17 more studies on sex offenders against children, the ratio of victimized female to male children was approximately 2:1. Interestingly, this ratio differs substantially from the ratio of gynephiles (men who erotically prefer physically mature females) to androphiles (men who erotically prefer physically mature males), which is at least 20 to 1 (Gebhard, 1972; Hirschfeld, 1920; Kinsey, Pomeroy, & Martin, 1948; Whitam, 1983).

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Such issues led to two systematic investigations of the erotic appeal of children for males who erotically prefer physically mature persons. In both investigations, the phallometric arousal test of gender and age preferences was used. This test assesses erotic preferences by measurement of penile volume changes during the presentation of visual and auditory stimuli representing various gender-age categories (Freund, 1963, 1967; Freund, Diamant, & Pinkava, 1958).

The first study (Freund, McKnight, Langevin, & Cibiri, 1972) assessed the erotic value of minors for gynephiles. The results indicated that for a substantial proportion of gynephiles the erotic impact of pubescent girls is quite strong, and that the female child also has significant, albeit weak, erotic arousal potential.

The second study (Freund, Langevin, Cibiri, & Zajac, 1973) compared gynephiles and androphiles on the erotic impact of children, pubescents, and adults of the preferred as well as of the nonpreferred gender. There were no differences between the two subject groups in respect to responses to adults, pubescents, and to 6- to 8-year-old children; however, responses of gynephiles to 8- to 11-year-old female children turned out to be larger than responses of androphiles to male children of that age. While this difference was significant, it was very small.

Unfortunately, in these earlier studies there were no neutral stimuli. Thus, comparison of gynephiles and androphiles (on responses to potentially erotic stimulus categories) rests on the assumption that these groups did not differ in penile responses to neutral stimuli. However, if this assumption is incorrect, the small difference between the groups' responses to children of the preferred gender would not be reliable. Therefore, the present study re-investigated this issue (with new groups of gynephiles and androphiles), using a new version of the phallometric test of age and gender preferences (Freund & Blanchard, in press) and a stimulus set which included neutral stimuli (landscapes).

(II) The Erotic Impact of the Nonpreferred Gender

In contrast to gynephiles, a substantial number of androphiles claim to be "bisexuals" and are often in heterosexual marriages. However, Krafft-Ebing (1986/1965), Hirschfeld (1920), and Kronfeld (1923) believe that self-labelled bisexuals are really androphiles. Consequently, an earlier study (Freund, Scher, Chan, & Ben-Aron, 1982) tested this hypothesis by comparing self-labelled bisexuals with androphiles who did not claim to be bisexuals (using both self-report scales and the phallometric test). The outcome supported the hypothesis of the

above-noted authors: while the self-professed bisexuals differed significantly from the androphiles who did not claim to be bisexual on the self-report scales, there was no such difference between the two groups on phallometrically indicated bisexuality.

The demonstration that self-professed bisexuals are really androphiles, however, does not rule out the possibility that androphiles in general may be more bisexual (i.e., demonstrate less erotic gender differentiation) than gynephiles. This possibility could not be sufficiently investigated by the study mentioned above (Freund et al., 1973) because of the absence of neutral stimuli. That is, the inclusion of neutral stimuli makes it possible to determine a baseline level, above which erotic arousal may be said to be occurring and below which erotic aversion may be said to be occurring. The results of the earlier investigation could only demonstrate that neither gynephiles nor androphiles have any gross aversion to the nonpreferred gender. A more precise comparison of gynephiles and androphiles was the task of the present study.

Method

Subjects

Two groups of paid volunteers, one gynephilic, the other androphilic, and a group of (gynephilic) sex offenders against physically mature females (without any offenses against minors) were selected by computer program from the data bank of phallometric test results of the sexology department of a psychiatric teaching hospital. All subjects had undergone the most recent version of the phallometric test (Freund & Blanchard, in press). The gynephilic volunteers were recruited from a government placement office for the unemployed, and the androphilic volunteers were recruited by an advertisement posted in a gay bookstore. The sex offenders against physically mature females consisted of patients with various expressions of a courtship disorder (Freund, Scher, & Hucker, 1983), such as voveurism, exhibitionism, etc., who had never been charged with rape, and of men who had been charged with rape. They were referred by psychiatrists examining them on court order or at the request of the offenders' lawvers.1

¹Every subject was told prior to the first test session that the test would measure his erotic preferences and that he could withdraw from the test at any time. Also, subjects were shown the volume sensor and told that blood circulation in their penis would be measured. Additionally, volunteers were informed that the test result would remain anonymous, and the offenders were told that the results would be reported to the referring physician. After answering the subject's pertinent questions, a consent form was given for signing.

Those among the gynephilic volunteers and the sex offenders against women whose test outcome was interpreted (by a computer program) as indicating androphilia were excluded from the study as were androphilic volunteers who were erroneously diagnosed as gynephiles. Individuals whose results showed signs of faking (Freund, Watson, & Rienzo, 1988) were not included in the present investigation.² Of the remaining individuals, single test sessions were discarded if the protocol indicated that a technical error had occurred or if the overall test response for that session was insufficient as indicated by the "output index" (see below).

The phallometric test was administered in two sessions. Table 1 shows number, mean age, and median education for each group. The two sessions differ in respect to these numbers because (a) only valid test sessions were included, and (b) when this test version was introduced, we experimented initially with the number of times the different stimulus categories were presented. Results of subjects who received only one test session in its final version were included only for that session and not for the other in which the preliminary version was used (in Table 1 these cases are listed as "Not given").

Procedure

Description of the test. Both phallometric test sessions included pictures of nude physically mature and physically immature females and males, successively presented one at a time on a screen and accompanied by taped narratives. A break separated the two sessions to minimize fatigue effects (as had also been intended with the variation of types of stimulus presentation-see below). In Session One, each of 27 trials lasted 28 seconds and consisted of two consecutive movie strips each showing a different person of the same gender-age category walking towards the viewer. In Session Two, each of 25 trials lasted 54 seconds during which slides of 3 nude persons were shown successively such that 3 screens simultaneously showed a front view, a rear view, and the genital region. In the course of a trial, no one screen showed the same type of view (front, rear, genital region) twice. The narratives accompanying Session One described the persons on the screen engaging in neutral activities, such as swimming. In Session Two, the narratives described imaginary sexual interaction between the tested subject and the person on the screen.

²The signs of faking are: (a) a characteristic pattern of intentional movements in the response records; (b) the highest mean response in either of the two test sessions or the second highest mean response in the first session to neutral stimuli; and (c) the second highest mean response (in either test session) to a stimulus category of the gender opposite to the gender of the stimulus category most responded to, provided that at least one of the two categories is of physically mature persons and that the difference between the two means is not larger than 0.5 z-scores (see "Measurement").

Table 1

Group Characteristics of Gynephiles and Androphiles

	Gyne Off	Gyne Vol	Andro Vol	
Session I				
. N	36	56	28	
Mean age	27.0	25.6	26.7	
S.D. age	6.8	6.4	5.2	
Median Education	8 < Ed < 12	Ed = 12	Ed = 12	
Session II				
N	44	78	36	
Mean age	28.0	26.4	27.2	
S.D. age	7.0	6.8	5.4	
Median Education	8 < Ed < 12	Ed = 12	Ed = 12	
Single sessions not used				
Session I				
Invalid	13	11	4	
Not given	0	17	6	
Session II				
Invalid	4	2	0	
Not given	1	4	2	

Note. Gyne Off = gynephilic offenders, Gyne Vol = gynephilic volunteers, Andro Vol = androphilic volunteers, Ed = educational level, 8 < Ed < 12 = more than 8 grades completed but less than 12, Ed = 12 = 12 grades completed. Single sessions not used indicates the number of subjects in each group who provided only one usable test session: Invalid = session not usable because of insufficient response (Low O.I.) or technical error; Not given = preliminary version of the session administered, therefore not used in the comparisons.

When the phallometric test of gender-age preference is administered at the start of each session (after attachment of the volume sensor), the subject is involved in a conversation on neutral topics until penile volume does not diminish any more. After each trial, there is a waiting period until penile volume returns to and oscillates around the baseline level before commencement of the next trial. Subjects are monitored with a low light-level video camera to ensure that they are attending to the visual stimuli. Nine categories of stimuli were presented in Session One, including 4 age categories for each of the two genders and also one category of sexually neutral movie clips. The 4 age categories were: children of ages 5 to 8 and 8 to 11, pubescents of ages 12 to 15, and physically mature persons. Stimuli were presented in 3 successive blocks each consisting of 9 trials, one trial for each of the gender-age categories and one for the sexually neutral category (landscapes), in fixed random order. In Session Two, 4 gender-age categories, as well as a category of neutral slides (also landscapes), were presented in 5 successive blocks analogous to those in Session One. The younger category of children and the pubescents were not included in Session

Two. Session One was preceded by three habituation trials, Session Two by two.

Measurement. For each trial, penile volume changes (in mL) were measured in two ways: D-type scores, the largest deviation from initial value, and A-type scores, the area under the plotted response curve. The raw D-type scores were converted into standard scores, derived from each subject's own D-type data only, for each session separately, and the same operation was carried out with his A-type scores. These D-type and A-type standard scores were subsequently combined according to the formula $(z_n + z_{\Delta})/2$.

To avoid inclusion of test sessions in which there was virtually no response to the stimuli, each subject's overall level of responding was expressed for each session as an output index (hereafter O.I., Freund, Chan, & Coulthard, 1979; Freund & Blanchard, in press). This was the mean of the 3 highest responses in raw D-scores, responses to neutrals excluded. O.I. for Session One had to be at least 0.5 mL, while a minimum of 1.0 mL was necessary in Session Two.³

For each gender-age category, a one-way ANOVA was carried out, with groups as the independent variable and combined z-scores as the dependent variable. Differences between pairs of groups were assessed by Scheffé test.

Results

In neither of the test sessions was there a significant difference between the groups in respect to O.I. (one-way ANOVA for Session One: F < 1; d.f.: 2, 117; p = 0.66; for Session Two: F < 1; d.f.: 2, 155; p = 0.76). There was also no significant difference between the groups when all those subjects were included in this comparison who had been excluded only because of low O.I.

Tables 2 and 3 show the mean response of each group to each of the age categories of the preferred gender, minus the group's mean response to neturals (both in z-scores). Tables 4 and 5 show the same

³Diagnostic indicators. Diagnostic indicators were used in the present study to identify (and exclude) those individuals who had claimed to be gynephilic but were diagnosed as androphilic or who had claimed to be androphilic and were diagnosed as gynephilic. These indicators include a gender preference index (greatest mean response in z-scores to any age category of females minus greatest mean response to any age category of males) and two age preference indices, one for the diagnosis of pedophilia, the other for the diagnosis of homosexual hebephilia. The pedophilia index is the mean response to the category of physically mature males or females, whichever is larger, minus the mean response to any of the gender-age categories of children, whichever is largest. The homosexual hebephilia index is the mean response to physically mature females or males, whichever is greater, minus the mean response to male pubescents (this version of the test does not diagnose heterosexual hebephilia). Information about cutting scores and further details of the diagnostic process are contained in Freund and Blanchard (in press).

Table 2
Relativized Penile Response to the Preferred Gender Session I

	Subject Group			
Age Category	Gyne Off	Gyne Vol	Andro Vol	ANOVA+
6-8				
M	0028 _a	.0966	0586_{a}	F = 1.01
S.E.	(.0973)	$(.0627)^{a}$	(.0849)	p = 0.37
8-11				
M	.3811,	$.5102_{a}$.2239,	F = 2.00
S.E.	(-1128)	(.0863)	(.0932)	p = 0.14
12-15				
M	$.7533_{_{g}}$.6920	.9164	F = 1.01
S.E.	(.1048)	(.0838)	(.1607)	p = 0.37
Adult				
M	$1.7497_{\rm a}$	1.7241_{n}	1.5611	F < 1
S.E.	(.1239)	(.1063)	(.1739)	p = 0.61

Note. The first number in each cell indicates the given group's mean response (M) to the category in question minus its mean response to the sexually neutral category. The second number in the cell (in round brackets) indicates the standard error of this relativized mean (S.E.). Gyne Off = gynephilic offenders. Gyne Vol = gynephilic volunteers. Andro Vol = androphilic volunteers.

Within each age category, means having the same subscript are not significantly different at p < 0.05 according to the Scheffé test.

Table 3
Relativized Penile Response to the Preferred Gender Session II

	Subject Group			
Age Category	Gyne Off	Gyne Vol	Andro Vol	ANOVA+
8-11				
M	.8880,	.9558。	.7125	F = 1.32
S.E.	(.1113)	(.0824)	$(.1299)^{3}$	p = 0.27
Adult				
M	1.9055	1.8786.	1.7192_{s}	F = 1.09
S.E.	$(.0925)^{\circ}$	(.0627)	$(.1207)^3$	p = 0.34

Note. The first number in each cell indicates the given group's mean response (M) to the category in question minus its mean response to the sexually neutral category. The second number in the cell (in round brackets) indicates the standard error of this relativized mean (S.E.). Gyne Off = gynephilic offenders. Gyne Vol = gynephilic volunteers. Andro Vol = androphilic volunteers.

Within each age category, means having the same subscript are not significantly different at p < 0.05 according to the Scheffé test.

⁺df = (2.117) in every case.

⁺df = (2,155) in every case.

Table 4
Relativized Penile Response to the Nonpreferred Gender — Session I

Age Category	Subject Group			
	Gyne Off	Gyne Vol	Andro Vol	ANOVA+
6-8				
M	5283	$3491_{a,b}$	$1100_{\rm b}$	F = 4.88
S.E.	(.0741)	(.0774)	(.1007)	p = 0.01
8-10				
M	4117	$2418_{a,b}$	$.0593_{\rm h}$	F = 5.73
S.E.	(.0929)	(.0791)	(.0882)	p = 0.00
12-15				
M	3633	$1095_{a,h}$.0879 _b	F = 4.28
S.E.	(.1048)	(.0876)	(.1002)	p = 0.02
Adult				
M	3144_{a}	$2813_{\rm s}$.1332	F = 4.90
S.E.	(.0770)	(.0936)	(.1295)	p = 0.01

Note. The first number in each cell indicates the given group's mean response (M) to the category in question minus its mean response to the sexually neutral category. The second number in the cell (in round brackets) indicates the standard error of this relativized mean (S.E.). Gyne Off = gynephilic offenders. Gyne Vol = gynephilic volunteers. Andro Vol = androphilic volunteers.

Within each age category, means having the same subscript are not significantly different at p < 0.05 according to the Scheffé test.

Table 5 Relativized Penile Response to the Nonpreferred Gender — Session II

	Subject Group			
Age Category	Gyne Off	Gyne Vol	Andro Vol	ANOVA+
8-11				
M	.2020.	.1913,	.2956	F < 1
S.E.	(.0783)	$(.0657)^{\circ}$	(.0978)	p = 0.64
Adult				
M	.0111	.0242	.2394	F = 2.31
S.E.	(.0692)	$(.0657)^{\circ}$	(.0905)	p = 0.10

Note. The first number in each cell indicates the given group's mean response (M) to the category in question minus its mean response to the sexually neutral category. The second number in the cell (in round brackets) indicates the standard error of this relativized mean (S.E.). Gyne Off = gynephilic offenders. Gyne Vol = gynephilic volunteers. Andro Vol = androphilic volunteers.

Within each age category, means having the same subscript are not significantly different at p < 0.05 according to the Scheffé test.

⁺df = (2,117) in every case.

⁺df = (2,155) in every case.

relativised mean scores for each of the age categories of the non-preferred gender.

Tables 2 and 3 demonstrate that for none of the age categories of the preferred gender did the three groups differ from each other in respect to the difference between the mean penile response to that category and the mean penile response to neutrals.

The androphiles, however, differed significantly from both gynephilic groups in respect to responses to mature persons of the non-preferred gender (see Tables 4 and 5). The androphiles responded more to physically mature females than the gynephiles responded to physically mature males. The response of the gynephiles to physically mature males was less than that to neutrals, indicating aversion, whereas the response of androphiles to physically mature females was positive.

In respect to the remaining age categories of the nonpreferred gender, the androphiles differed significantly only from the sex offenders against adult females, with the androphiles responding relatively more than the sex offenders. The Scheffé test did not differentiate in any category between the gynephilic volunteers and either of the two remaining groups.

Discussion

The results of the present study suggest that the erotic attractiveness of male children (or pubescents) for androphiles is not greater than the erotic attractiveness of female children (or pubescents) to gynephiles. Thus, there must be another reason for the finding that the proportion of sex offenders against male children among homosexual men is substantially larger than the proportion of sex offenders against female children among heterosexual men (Cameron, 1985). Perhaps, the negative result of the present study supports an alternative hypothesis which focuses on homosexual pedophilia instead of androphilia, namely, that the development of pedophilia is more closely linked with homosexuality than with heterosexuality (Freund et al., 1984). However, since this explanation is still speculative, research needs to continue in this direction. From a more practical point of view, the negative finding in the comparison of gynephiles and androphiles (in respect to attractiveness of children of the preferred sex) indicates a reformulation of notions about sexual offenses against children. For example, those who blame androphiles for the relatively larger incidence of sexual offenses against male children, compared to the incidence of sexual offenses against female children, must come up

with a reasonable explanation of why these offenses are not actually perpetuated by pedophiles.

Both gynephilic groups showed an erotic aversion to males of all ages, whereas androphiles showed an erotic aversion only to the youngest age group of females. The interpretation that this is a cultural phenomenon is supported by the fact that only the (gynephilic) sex offenders, who probably tried their best to have a favorable test outcome, attained a convincing degree of aversion, responding less to every age category of males than to neutrals when compared to androphiles' responses to females. The gynephilic volunteers, on the other hand, differed significantly in this direction from the androphilic volunteers only with regard to responses to adults, and not with regard to the remaining age-categories. This difference may therefore be due to cultural taboos.

Finally, the question may be asked to what degree the phallometric method is pertinent in this kind of analysis. The answer is that there have been numerous studies on phallometric differentiation between heterosexual pedophiles, homosexual pedophiles, gynephiles, and androphiles (most of which are listed in Freund & Blanchard, in press). These studies show that only rarely are sex offenders against male children diagnosed as androphiles and that the phallometric diagnosis of gynephilic and androphilic volunteers almost always corresponds to their claimed erotic preference.

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