

# Preferred partner characteristics in homosexual men in relation to speculated patterns of brain differentiation

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## **Abstract**

**OBJECTIVES:** The current study was designed to test a neurohormonally based theory of sexual orientation and preferred partner characteristics in homosexual men. The theory holds that the brains of homosexual men are masculinized and feminized directing attraction to targets younger and more masculine than self, and the brains of homosexual adolescents are incompletely masculinized and feminized directing attraction to targets older and more masculine than self.

**METHODS:** Ninety-six homosexual men completed questionnaires that asked them to rate morphological and behavioral characteristics associated with ethologically relevant indicators of masculinity. The participants made ratings for themselves as adolescents and adults, their current partners and idealized partners as adults, and their idealized partners as adolescents.

**RESULTS:** Results of within-subjects multivariate analyses of variance supported most of the hypotheses. Participants as adults rated their idealized partners as more masculine than themselves and their real partners on five measures: height, weight, muscle development, facial hair, and sexuality. As adolescents they indicated a preference for males older and more masculine than self. The participants in adulthood did not show the predicted preference for partners younger than themselves.

**CONCLUSION:** The increased ratings of sexuality for self from adolescence to adulthood support the contention that some additional masculinization of the brain may occur with aging. The increased ratings of body size for the idealized target from adolescence to adulthood keeps the target more masculine than self across developmental periods. This phenomenon is consistent with the speculated feminization of the brain at both periods and its effects on partner preferences

## Introduction

Theorists have proposed a neurohormonal model of sexual orientation development. These theories hold that prenatal hormones [1, 2], and perhaps some postnatal hormones [2], affect the brain structures which contribute to the development of sexual orientation. Using this model, Feierman [3] attempts to link specific psychosexual responses to particular patterns of brain differentiation. He argues that a masculinized brain directs attention to targets who are younger than self and an unmasculinized brain directs attention to targets older (defined as same age as or older) than self. A feminized brain directs attention to targets who are more masculine than self while a defeminized brain directs attention to targets more feminine than self. Feierman argues that the brains of heterosexual men are masculinized and defeminized directing attraction to targets who are younger and more feminine than self. He speculates that the brains of homosexual men are masculinized and feminized directing attraction to targets who are younger and more masculine than self. Feierman argues that the brains of heterosexual adolescents are incompletely masculinized (unmasculinized) and defeminized directing attraction to targets who are older than self and more feminine than self. He argues that the brains of homosexual adolescents are incompletely masculinized (unmasculinized) and feminized directing attraction to targets older and more masculine than self. Feierman speculates that as they move into adulthood both heterosexual and homosexual adolescents experience increased masculinization of the brain. It has been speculated that this may represent increased activation of prenatally masculinized brain structures under the influence of postpubertal hormones or actual postnatal masculinization due to the effects of testosterone in puberty [2].

Psychological research has shown that the mate preferences of heterosexual adolescent and adult males are consistent with the model [4]. Also, there is evidence that younger heterosexual men are more attracted to women slightly older than they are while older heterosexual men prefer women younger than themselves [5, 6]. Homosexual men put much emphasis on physical and sexual attractiveness in partner choice [7, 8, 9], and Mealey [10] suggests that homosexual men prefer masculine looking partners. However, there is limited evidence that homosexual men actually prefer partners more masculine than themselves. Homosexual men, like heterosexual men, seem to demonstrate a preference for younger partners [5, 6, 11, 12]. Although, younger homosexual men show less interest in the youthfulness of partners than do older homosexual men [5, 6]. Some homosexual adolescent males show a strong interest in older partners [13], but it is unclear if this is representative of all homosexual adolescent males. Past studies of partner preference characteristics have assessed global descriptors such as "attractiveness" or "masculinity", thus, the individual characteristics which contribute to the perception of masculinity are unclear. The current study was designed to test Fei-

erman's theory of brain differentiation and preferred partner characteristics in homosexual men across developmental periods using specific morphological and behavioral characteristics consistent with ethological conceptualizations of masculinity.

## Material and Method

Participants were members of 48 male couples ( $N=96$ ) who ranged in age from 24 years to 65 years with a mean age of 39 years. Participants individually completed questionnaires that asked them to rate various attributes of themselves as adolescents, themselves as adults, their current partners, their idealized partners as adults, and their idealized partners as adolescents. The attributes on which the participants made ratings included age as well as morphological and behavioral characteristics which in greater presence are considered masculine (Feierman, personal communication). The morphological characteristics include the following: height (measured in meters), weight (measured in kilograms), amount of body hair and level of muscle development (both measured on a Likert Scale of 1–7 with 1=lowest and 7=highest), and amount of facial hair (measured on a Likert Scale of 1–3 with 1=least and 3=most).

A behavioral description of a stereotype of male sexuality, and consistent with ethological models of stereotypic male sexual behavior, was presented. Participants were asked to rate their own sexuality and that of idealized and real partners for similarity with the stereotype on a Likert Scale of 1–7 (with 1=least and 7=most). The item is as follows: "A usual description of male sexuality includes the following characteristics: confident, strong sex drive, enjoys looking for new sexual partners, sexually aggressive, initiates sexual activity, takes the active role in sexual interactions, enjoys sexual activity, primary goal of sex is orgasm, sexually dominant, is sexually aroused by the sexual pleasure he makes his partner experience". All participants were assigned the age of 18 years as age of adolescence since developmental psychologists generally consider 18 years to be close to the end of biological adolescence [14].

## Results

Four within-subjects multivariate analyses of variance (MANOVAs) were performed on the data followed by univariate  $F$  tests. In the first analysis, the characteristics of the participants as adults were compared to those of the idealized sexual partner. The MANOVA was significant, Wilks Lambda  $F(7, 75) = 12.41, p < .001$ . Univariate  $F$  tests were significant for five of seven variables: height, weight, muscle development, facial hair, and sexuality. The results are seen in Table I.

In the second analysis, the characteristics of the participants' real partners were compared to those of the idealized partners. The MANOVA was significant, Wilks Lambda  $F(7, 75) = 10.46, p < .001$ . Univariate  $F$  tests were significant for six of seven variables: age,

Table I. Self versus Idealized Partner

	Self		Idealized Partner		F	p	Eta <sup>2</sup>
	Mean	SD	Mean	SD			
Age	38.35	8.27	36.87	6.05	2.15	.147	.026
Height	1.77	.06	1.80	.05	20.48	<.001	.202
Weight	78.99	8.57	81.20	6.92	4.50	.037	.053
Muscle Development	4.55	1.24	5.48	1.00	53.05	<.001	.396
Facial Hair	1.39	.52	1.57	.55	7.87	.006	.089
Body Hair	3.27	1.28	3.38	1.42	.35	.557	.004
Sexuality	4.98	1.26	5.37	1.16	9.59	.003	.106

Note. *df* = 1, 81 for F tests.

Table II. Real Partner versus Idealized Partner

	Real Partner		Idealized Partner		F	p	Eta <sup>2</sup>
	Mean	SD	Mean	SD			
Age	38.56	8.67	36.87	6.05	4.30	.041	.051
Height	1.77	.06	1.80	.05	22.07	<.001	.214
Weight	79.13	9.11	81.20	6.92	4.76	.032	.055
Muscle Development	4.56	1.22	5.48	1.00	39.02	<.001	.325
Facial Hair	1.37	.48	1.57	.55	16.34	<.001	.168
Body Hair	3.22	1.40	3.38	1.42	1.01	.317	.012
Sexuality	4.77	1.37	5.37	1.16	13.20	<.001	.140

Note. *df* = 1, 81 for F tests.

height, weight, muscle development, facial hair, and sexuality. Results are seen in Table II.

In the third analysis the participants as adolescents were compared to their idealized partners in adolescence on two variables: age and sexuality. The MANOVA was significant Wilks Lambda  $F(2,80)=72.85, p<.001$ . The univariate *F* tests were significant for both variables age  $F(1, 81)=146.78, p<.001$  and sexuality  $F(1, 81)=10.33, p<.002$ . The results indicate that for participants as adolescents (measured as 18 years old) the average age of the idealized partner was 25.72 years ( $SD=5.77$ ), and the average rating of sexuality of participants as adolescents was 4.45 ( $SD=1.73$ ), while the average rating of sexuality of the idealized partner in adolescence was 5.13 ( $SD=1.66$ ). A follow up *t* test for paired samples revealed a significant difference between participants' ratings of themselves on sexuality in adolescence ( $M=4.43, SD=1.74$ ) and adulthood ( $M=4.92, SD=1.30$ ),  $t(89)=2.69, p=.009$ .

In the fourth analysis, the characteristics of the participants' idealized sexual partners in adulthood versus adolescence were compared. The MANOVA was significant, Wilks Lambda  $F(7, 68)=30.88, p<.001$ . Univariate *F* tests were significant for three of seven variables: age  $F(1, 74)=211.31, p<.001$ ; weight  $F(1, 74)=10.81, p<.002$ ; and muscle development  $F(1, 74)=9.81, p<.002$ . Results indicate that the age of idealized sexual partner in adolescence was 25.71 years ( $SD=5.81$ ) and in adulthood 36.85 years ( $SD=5.87$ ); the weight of the idealized partner in adolescence was 78.76 kilograms ( $SD=7.32$ ) and in adulthood 81.28

kilograms ( $SD=6.41$ ); and muscle development of idealized partner in adolescence was 5.11 ( $SD=.92$ ) and in adulthood was 5.47 ( $SD=.99$ ).

## Discussion

Most of the results support Feierman's [3] theory that homosexual males are attracted to partners who are morphologically and sexually more masculine than themselves. Participants rated their idealized partners as more masculine than both themselves and their real partners on five measures: height, weight, muscle development, facial hair, and sexuality. In both cases the measures with the greatest effect sizes were muscle development and height, and these characteristics are especially powerful signs of masculinity and physical attractiveness in males [4]. However, the results also suggest that homosexual men may not be attracted to men too much bigger than themselves. The average real difference between self and idealized partner was only .03 meters in height and 2.21 kilograms in weight.

Contrary to expectations, the participants did not show a preference for partners younger than themselves, although their idealized partners were 20 months younger than their real partners. However, this difference is unlikely to create meaningful age-related physical differences. The great variation in the methodologies for assessment of age preferences in all the studies indicated may account for the discrepant results [5, 6, 11, 12].

The participants reported that as adolescents they had a strong interest in older males and those with a sexuality more masculine than their own. The average age of the idealized partner was more than 7 years greater than that of the participants as adolescents. Since this age difference makes a clear distinction between adolescence and young adulthood, it can be assumed that the idealized partners would have also exhibited more masculinized morphological characteristics such as greater weight, muscle development, body hair, facial hair, and perhaps height. Rind [13] has shown that adolescent males who had sex with adult males were strongly attracted to older males and sought them out or took advantage of invitations for sex. The results of the current study suggest that attraction to adult males may be a common element in the sexual experience of homosexual adolescent males.

The participants rated their own sexuality as more masculine in adulthood than in adolescence. This lends some support to Feierman's [3] theory which holds that there is some increased masculinization between adolescence and adulthood, resulting in more stereotypic male sexual behavior patterns. The idealized partners of participants as adults were rated greater on weight and muscle development than as adolescents. This suggests that as the participants themselves became more morphologically masculine with age the body size of the idealized target also increased keeping it consistently more masculine than self. This phenomenon is consistent with Feierman's contention that in homosexuals the brain is feminized in both adolescence and adulthood.

There are several limitations to the current study. The study does not address the actuality of the brain organization which theoretically underlies the partner attribute preferences, and the indicated preferences may be due to other factors. Retrospective ratings were used for the adolescent data, thus the accuracy of the memories may be of concern. Some ratings were on fantasy partners because fantasy may reveal unconstrained preferences. However, the content of fantasies cannot be taken as *prima facie* evidence of innate biological sources because fantasies are affected by what is seen, read, and actually experienced [15]. This sample may not be representative of all homosexual men. It has been argued that the category "homosexual" is not homogenous, and individuals categorized as such have a wide range of sexual behaviors, interests, and preferences [16]. However, the overall pattern of results suggests that future studies attempting to link speculated patterns of brain differentiation and psychosexual behavior in humans may be worthwhile.

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