Maternal Inheritance and Familial Fecundity Factors in Male Homosexuality

Qazi Rahman · Anthony Collins · Martine Morrison ·
Jennifer Claire Orrells · Khatija Cadinouche ·
Sherene Greenfield · Sabina Begum

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In our article “Maternal Inheritance and Familial Fecundity Factors in Male Homosexuality” (Rahman et al., 2008), we attempted to examine the familial history of male homosexuality and test the “fertile female” hypothesis for the trait in a British sample. We concluded that both ethnic “white” and “non-white” homosexual men ($n = 147$) had a significant excess of maternal but not paternal line male homosexual relatives compared to heterosexual men ($n = 155$). These data were presented in Tables 1, 2. Upon re-examination of Tables 1, 2, the data presented therein were incorrect with respect to the numbers and percentages of homosexual relatives. These have now been corrected (see Tables 1, 2). However, the Mann–Whitney statistical tests still remain as this is the appropriate “difference” test for the comparisons being made between heterosexual and homosexual men. The data were too skewed for parametric tests to be performed. Additionally, tests of association, such as chi-

square, are inappropriate in this case because they violate the assumption of independence of observations (cf. Camperio-Ciani, Corna, & Capiluppi, 2004). It is worth noting that while the percentages in Tables 1, 2 appear to show a difference between heterosexual and homosexual men in the homosexual paternal line male relatives and homosexual paternal line female relatives (where homosexual men are not hypothesized to have more homosexual relatives), the difference between the two groups is not actually statistically significant (although the alpha value does approach significance here; to aid clarity, exact alpha values for Mann–Whitney tests are reported).

References

- Camperio-Ciani, A., Corna, F., & Capiluppi, C. (2004). Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity. *Proceedings of the Royal Society of London, Series B, Biological Sciences*, 271, 2217–2221.
- Rahman, Q., Collins, A., Morrison, M., Orrells, J. C., Cadinouche, K., Greenfield, S., et al. (2008). Maternal inheritance and familial fecundity factors in male homosexuality. *Archives of Sexual Behavior*, 37, 962–969.

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Q. Rahman (✉)
School of Biological Sciences, Queen Mary,
University of London, Mile End Road, London E1 4NS, UK
e-mail: q.rahman@qmul.ac.uk

Q. Rahman
Institute of Psychiatry, Kings College, University of London,
London, UK

A. Collins · M. Morrison · J. C. Orrells · K. Cadinouche ·
S. Greenfield · S. Begum
School of Psychology, University of East London, The Green,
London, UK

Table 1 Means, SDs, and frequencies for maternal and paternal line homosexual relatives of white probands

Variable	Heterosexual				Homosexual				Cohen's d^c
	M	SD	Homosexual/ total	% Homosexual	M	SD	Homosexual/ total	% Homosexual	
Homosexual paternal line male relatives ^a	0.12	0.47	9/72	12.5	0.28	0.76	26/92	28.26	.25
Homosexual paternal line female relatives ^b	0.09	0.53	6/61	9.83	0.17	0.44	15/85	17.64	.16
Homosexual maternal line male relatives ^c	0.08	0.39	6/74	8.10	0.19	0.46	19/100	19.0	.25
Homosexual maternal line female relatives ^d	0.01	0.11	1/70	1.42	0.06	0.25	6/87	6.89	.25

^a $U = 2979.50, p > .05 (.068)$ ^b $U = 2296.00, p > .05 (.051)$ ^c $U = 3277.50, p < .05 (.023)$ ^d $U = 2878.50, p > .10 (.100)$ ^e Cohen's d was calculated as $(M_1 - M_2)/((SD_1 + SD_2)/2)$ **Table 2** Means, SDs, and frequencies for maternal and paternal line homosexual relatives of non-white probands

Variable	Heterosexual				Homosexual				Cohen's d^c
	M	SD	Homosexual/ total	% Homosexual	M	SD	Homosexual/ total	% Homosexual	
Homosexual paternal line male relatives ^a	0.04	0.20	2/45	4.44	0.17	0.39	3/17	17.64	.41
Homosexual paternal line female relatives ^b	0.09	0.36	4/44	9.09	0.00	0.00	0/14	0	.35
Homosexual maternal line male relatives ^c	0.07	0.34	3/41	7.31	0.46	0.87	6/13	46.15	.59
Homosexual maternal line female relatives ^d	0.04	0.21	2/42	4.76	0.16	0.57	2/12	16.66	.27

^a $U = 332.00, p > .05 (.091)$ ^b $U = 287.00, p > .10 (.320)$ ^c $U = 198.00, p < .05 (.011)$ ^d $U = 242.00, p > .10 (.600)$ ^e Cohen's d was calculated as $(M_1 - M_2)/((SD_1 + SD_2)/2)$