The Clinical Profile of Male Transsexuals Living as Females vs. Those Living as Males

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The clinical profiles of five male groups were compared: transsexuals who live as females (FEM), those who live as males (MAL), homosexual patients (HOP), homosexual controls (HOC), and heterosexual controls (CON). The MAL group showed psychotic features on the MMPI and a greater frequency of suicide attempts than the other groups. Their sexual behavior was incongruous in that they have had substantial sexual contact with men but less often desired sexual contact with men. They also less often desired to handle the penis of an adult man or to kiss him on the lips. They were more likely to find handling another's penis disgusting, However, they showed considerable involvement of their penis in sex relations with men. The FEM group, in contrast, had MMPI profiles suggestive of character disorders and tended to engage in antisocial behavior. Both MAL and FEM groups were similar in MMPI and 16 PF "femininity." The HOP group showed overall similarity to MAL but was not as pathological. The HOC and CON groups were similar in being normal but their sexual behavior differed, as expected. The paradoxical behavior of MAL is discussed as well as the parallel of the FEM group's behavior to that of criminals.

KEY WORDS: transsexual; personality; homosexual; masculinity-femininity; cross-dressing.

INTRODUCTION

While the clinical trend has been to regard transsexualism mainly as extreme feminine gender identity (cf. Freund et al., 1974a), there has not been total agreement on this matter. Person and Ovesey (1974) have argued that the

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transsexual syndrome in males is not a unitary phenomenon and they question the transsexual's conviction of femaleness. They argue that the "primary transsexual" is *confused* about his gender identity rather than convinced of his femininity. Meyer (1974) has shown that there are many types of patient who apply for sex-reassignment surgery, including some with schizoid personalities.

Some support for Person and Ovesey's hypothesis comes from the fact that not all transsexual patients are "homosexual." Hoenig et al. (1970) found that 16% of the transsexual men in their study were entirely heterosexual on the Kinsey scale, while Barr et al. (1974) reported that two of 24 male transsexuals in their study appeared to be heterosexual as assessed by penile volume measurement. Further support for the hypothesis is indicated by the presence of other psychiatric diagnoses and maladjustment with transsexualism. Hoenig et al. (1970) found that psychiatric disorders accompanied transsexualism in 70% of the cases. Work adjustment was poor and antisocial or criminal behavior was present in 47% of the patients. Only 20% of the crimes were related to sexual behavior. Prostitution occurred (but only in males) in 31% of the cases. The main results of their study suggest that two elements are important in transsexualism - emotional disturbance and antisocial tendencies. It is not possible from their work to tell how much these two factors overlap or to what degree they are related to "femininity." Presumably, the more feminine transsexuals are more stable and can adjust more readily to the female role.

The present study attempted to examine clinical psychopathology and degree of femininity in the male transsexual, using standardized psychological tests. To this end, male transsexuals were classified, as first suggested by Green (Money and Green, 1969, p. 470), by the degree to which they had attempted to adjust to the female role, an adjustment which has been a primary consideration in proceeding with surgery (cf. Stoller, 1973; Newman and Stoller, 1974). There were two groups, one living as females and the other continuing (in public at least) to live and dress as males. The transsexuals were compared with the following control groups: (1) nontranssexual homosexual patients who shared two features with the transsexuals, (2) "normal" homosexuals who were not transsexuals or patients and thus only shared sex object preference with transsexuals, and (3) "normal" heterosexuals who shared none of the above characteristics. Thus the groups allow a comparison of varying degrees of gender identity while sex object preference and patient status are controlled.

METHOD

Subjects

There were five groups of males, making a total sample of 107 subjects. Two groups were transsexuals. The first of these (hereafter FEM) had, for 1 year

or more throughout their contact with the investigators in this study, lived consistently as females (N = 25). The other group (hereafter MAL) continued to live as males during this period, although many cross-dressed regularly in private and some did so sporadically in public (N = 19).

Two groups of nontranssexual homosexual males were employed for comparison. The first (hereafter HOP – homosexual patients) consisted of exclusive homosexuals who had been referred by the court or who were seeking help from a psychiatric clinic (N=20). The second group (hereafter HOC – homosexual controls) had never been hospitalized in a psychiatric institution and had never consulted a mental health professional (N=19). This latter group was obtained through the Community Homophile Association of Toronto (CHAT) or through a contact in the homosexual community.

Finally, a heterosexual control group (hereafter CON) was used (N = 24). This group was obtained by a notice placed in a local newspaper and in the placement office at the University of Toronto. Many control subjects (36) obtained by these means were excluded because of drug addiction, sexual deviation, and/or mental illness. This presents an obvious limitation of the study insofar as the heterosexual control group represents a selected sample.³

Procedure and Materials

The patients were administered, upon admission, a test battery, CAPER (Paitich, 1973). Certain tests of interest for this study were selected: MMPI, 16 PF, Sex History Questionnaire (SHQ), Parent-Child Relations Questionnaire (PCR), Raven Standard Progressive Matrices, and the Clarke-WAIS Vocabulary Test. Additional information was extracted from the remaining questionnaires – age, years of education, suicidal attempts and thoughts, use of alcohol and drugs, number of sexual and nonsexual offenses, marital status, home stability, number of sibs of each sex, and birth order.

The heterosexual and homosexual control subjects were tested either in the research wing of the Institute or, in the case of some homosexual subjects, at CHAT.

Results were scored by a computer subroutine CAPER and then analyzed by DATATEXT, SPSS, and BMD X82 and/or BMD07M. MANOVA and stepwise discriminant function analysis were employed. Not all subjects had all data so degrees of freedom will not be identical for all results. Means were compared after univariate ANOVA by the Newman-Keuls tests (Winer, 1962); χ^2 s were also used.

 $^{^{3}}$ Comparison of this control group with a more recent sample of normals (N = 30) indicated that there were no major differences in the two groups. In the latter sample, only three subjects were excluded.

RESULTS

Age, Education, and Intelligence

There were no significant differences in the group in age (grand mean = 27.54 years, SD = 7.38), but the transsexual groups were less educated and less intelligent than the remaining groups (mean education = 11.11 years vs. 14.91, mean IQ vocabulary = 109.51 vs. 116.98, and Raven IQ = 109.75 vs. 118.99). There were no other significant differences. Such group differences in IQ and education can influence clinical measures of interest. However, covarying education with other variables resulted in only one significant change to a PCR scale (described later) while covarying both IQ scores had no significant effects.

Family Background

It has been suggested that family disruptions (divorce, death, etc.), in particular, absence of father, play a part in the etiology of homosexuality and/or atypical gender identity (cf. Freund et al., 1974b; Bieber et al., 1962). Therefore, the family constellations of subjects were examined as follows: (1) comparison of full family (mother and father) until age 16 vs. single parents, brought up by relatives, etc. (hereafter family disruptions); (2) number of sisters; (3) number of brothers; and (4) birth order — first or only child vs. later born. There were no significant differences among the groups on these comparisons.

The 16 PCR scales (Paitich and Langevin, 1976) from CAPER were used to examine a range of parent-child relationship variables among the five groups. For mother and father separately, these were aggression to subject, subject's aggression to parent, parents' aggression to each other, parents' competence, strictness, indulgence, and affection to subject, and identification of subject with both parents. Four scales significantly differentiated among groups. Interestingly, three were father scales – father competence, father affection, and father identification – while only one was related to mother – mother indulgence (Table I). The results for father affection were nonsignificant when education was covaried. The trend was for both transsexual groups to report father as less competent and affectionate than the other groups and they also identified less with him. Strength of father identification was, in increasing order, transsexuals, homosexuals, and heterosexuals, and thus it was to some degree negatively related to "femininity."

The results of the mother indulgence scale were interesting in that MAL and HOP, both of them clinical groups, scored highest while the nonclinical HOC and CON groups scored lowest. Thus the image of the overindulging

Scale	F	η	Percentage correctly classed in own group ^a	Percentage correctly classed as control vs. patients ^a
Father competence	3.259 <i>b</i>	0.113	29.90	62.61
Father affection	3.295b	0.114	27.10	61.68
Father identification	8.415 ^c	0.248	37.38	71.96
Mother indulgence	3.135^d	0.109	24.29	60.74

Table I. Selected PCR Results

mother appears to be valid for clinical cases but not for healthy homosexuals and may reflect a more general pathology which is not inherently a part of homosexuality.

Marital Status

Eighty-four percent of the subjects were single and never married. Six MAL, five FEM, one HOP, and five CON had married at some time. Comparing only MAL plus FEM vs. HOP plus HOC, results were significant ($\chi^2 = 14.00$, df = 1, p < 0.001), but MAL and FEM did not differ from each other ($\chi^2 = 0.74$, df = 1, p < 0.05).

Use of Drugs and Alcohol

All groups were conservative with respect to use of nonmedical drugs, although the heterosexual controls were especially selected in this regard. In all groups combined, only 22.10% had used drugs nonmedically; 10.57% had tried marijuana, 8.65% LSD, and 2.88% miscellaneous stimulants. The two transsexual groups used drugs more than the other three groups ($\chi^2 = 30.57$, df = 4, p < 0.001), but there were no other significant differences.

There were significant differences in self-report of alcohol use, although most groups claimed to be, at worst, moderate drinkers (F = 4.321; df = 4, 97; p < 0.003; $\eta = 0.151$). The two normal control groups drank more than MAL transsexuals and there were no other significant differences.

^a The percentages classed correctly were derived from discriminant function analysis. Multivariate F = 1.645; df = 72, 336.60; p < 0.001; 55.14% correct assignment to own group; 75.70% correct for control groups vs. patients.

 $b_p < 0.01$.

cp < 0.001.

dp < 0.05.

Criminal Offenses

Criminal offenses were categorized as "sexual" and "nonsexual." Since the heterosexual and homosexual control groups had no sexual offenses, they will not be considered further. No clinical subjects had more than three "sexual" charges and 80% had no charges while 13% had one charge. The HOP group had more "sexual" charges than the other two groups ($\chi^2 = 12.98$, df = 2, p < 0.01). There was a nonsignificant trend for the FEM group to have more charges than the MAL group ($\chi^2 = 3.70$, df = 1, p < 0.10).

When nonsexual offenses are examined, it is the FEM transsexual group which tended to have most. However, all groups had few offenses; they ranged from 5% to 10.52% for non-FEM groups and 26.08% for FEM. By dichotomizing the groups into FEM and non-FEM, results were significant ($\chi^2 = 6.22$, df = 1, p < 0.02).

Only two charges for the FEM groups were directly related to cross-dressing. The most frequent sexual offense among the transsexuals was related to prostitution, while breaking and entering and theft were their most common nonsexual charges.

Sexual History

The CAPER SHQ (Paitich et al., 1976) consists of 225 items which sample a wide range of sexual behavior. In the present study, the following were absent in all groups: pedophilia, exhibitionism, voyeurism, frotteurism, rape, and toucheurism. Differences appeared in both homosexual outlet and heterosexual outlet as well as in "transvestism." Items in the factors represented by these outlets were examined separately for possible group differences (Table II).

As one would expect, the heterosexual CON group had higher scores than the remaining groups on all items related to heterosexual outlet. However, the MAL and FEM groups had fewer dates with females and kissed them less than the two homosexual groups did. More HOC and HOP subjects reported having heterosexual desires and less disgust in such desires than MAL and FEM. The four homosexual groups were similar in lacking the experience of intimate sexual contact with females (touching breasts and vagina and having intercourse).

The heterosexual CON group had significantly less homosexual contact and experience than the other four groups. In addition, the homosexual control group HOC reported the most experience and desire for a wide range of sexual contact with males, as well as the least disgust for such acts. The clinical HOP group was a close second in experience to HOC while MAL was next and the FEM group generally reported the least homosexual experience.

The pattern of results for "desire" and "disgust" items was similar to that of the "experience" items. However, an interesting result emerged: significantly

Item	MAL	FEM	CON	НОР	нос			
Dated female ^a	4	5	38	22	16			
Kissed female ^a	8	4	37	16	18			
Touched naked breastsa	1	1	21	1	2			
Touched vagina a	2	1	20	0	1			
Heterosexual intercoursea	1	1	20	0	0			
Homosexual desirea	61	74	0	65	91			
Kissed male	18	22	0	22	31			
Male touched penis	16	12	0	30	32			
Touched another's penis	20	15	0	25	30			
Received fellatioa	10	3	0	21	28			
Performed fellatio	17	12	0	17	25			
Performed anal intercourse ^a	'1	0	0	9	14			
Received anal intercoursea	10	7	0	5	12			
Finger in rectuma	4	3	0	4	18			
Wore skirt or dressa	73	88	0	0	1			
Wore female undergarmentsa	71	88	0	0	0			
Wore female stockings ^a	66	88	0	0	0			
Wore female shoesa	57	88	0	0	0			
Wore female jewelrya	67	86	0	0	1			
Wore female wiga	31	68	0	0	1			

Table II. Mean Frequencies of Selected Sex History Questionnaire Items

fewer MAL subjects, as contrasted with the other homosexual groups, desired sexual contact with men, fewer wanted to handle the genitals of adult males or kiss men on the lips, and they were more likely to find the handling of another's penis disgusting.

One might expect that the transsexual groups who wish their penis removed would show less involvement of their own penis in homosexual acts. In fact, both transsexual groups reported significantly less handling of their penis and less fellatio (by males) than the two homosexual groups (Table II), and they were less likely to have performed anal intercourse. MAL and FEM differed only in the frequency of receiving fellatio, the latter receiving fellatio significantly less than the former. Thus clinical expectations were supported for FEM, but there was an incongruity again for MAL in that the penis was involved to a considerable degree in their sex relations.

There were no significant differences among CON, HOC, and HOP on six items related to cross-dressing. The two transsexual groups cross-dressed significantly more than the other three groups. When only FEM and MAL are compared, the former cross-dressed significantly more with stockings, shoes, jewelry, and wigs. The differences for skirt or dress and female undergarments were in the expected direction but not significant (p < 0.10).

^a Indicates that the F statistic was significant for that item when the four homosexually oriented groups were compared.

Personality

All the personality scales of the MMPI, except Mania and Lie, differentiated the groups significantly (Table III). If one ranks the means for the five groups, the MAL group showed the most pathology and the HOP group was next, followed by FEM. The HOC group was comparable to CON, stressing the importance of a "normal" homosexual sample. The MAL group was unique in having elevations above t=70, for the D, Pt, and Sc scales (Table IV). These scale elevations reflect psychotic features in the group. The FEM group, in contrast, had t scores above 70 for Pd and Mf, reflecting features of character disorders. The profile for the HOP group was similar to that of MAL, but only D and Mf scale scores exceeded t=70. While their Sc score did not exceed t=70, it was significantly higher than for HOC and CON. In fact, the HOP group represents a mixture of "sick" and "normal" individuals, the latter being adjusted homosexuals who hope to "cure" a problem which may be related to social inconvenience. The "sick" group has some other emotional disturbance and probably would have it without their homosexuality.

The predominant scale on the MMPI was Mf. The CON group scored significantly lower than all the other groups (38.31% correct assignment to own group, 80.37% correct for CON vs. others). The other four groups showed considerable overlap, and the only significant difference showed MAL higher

Table	III.	F	Statistic	and	Means	of	MMPI	Scale	Scores
		(k	Correct	ed) fo	or the I	iv	e Grou	ps	

		Group						
Scale	F statistic a	MAL	FEM	CON	HOP	нос		
L	0.855	4.53	4.72	4.33	4.25	3.53		
F	2.961^{b}	8.68	5.88	6.58	6.60	5.32		
K	2.665^{b}	12.26	15.40	15.75	16.35	15.16		
Hs	4.701 ^c	15.95	11.08	12.08	13.50	11.16		
D	7.586^{d}	27.79	23.20	19.46	25.00	19.89		
Hy	3.945 ^c	26.21	22.88	21.00	23.90	19.89		
Pd	8.626d	27.21	28.68	23.00	25.95	22.63		
Mf	15.094 <i>d</i>	40.42	38.64	29.33	33.95	35.63		
Pa	6.283^{d}	13.05	11.80	9.29	10.25	8.79		
Pt	6.703^{d}	34.47	28.44	25.83	30.50	25.32		
Sc	11.117^d	37.00	27.08	25.21	31.65	25.74		
Ma	2.165	19.74	18.80	21.83	18.95	20.68		
Si	3.934 <i>c</i>	33.47	25.56	23.50	27.10	23.89		

a Multivariate F = 3.431; df = 52, 350.68; p < 0.001; 68.22% correct assignment to own group; 85.04% correct for controls vs. patients.

bp < 0.05 (df 4, 102).

 $c_p < 0.01 \text{ (df 4, 102)}.$

 $d_{\mathcal{D}}^{\mathcal{F}} < 0.001 \text{ (df 4, 102)}.$

Measure	MAL	FEM	HOP	HOC	CON
Education	_		+	+	+
IQ		_	+	+	+
Good father relations	_		+	+	++
Mother indulgence	+		+	_	
Married	+	+	_	-	_
Nonmedical drugs used	+	+		_	_
Alcohol used	-	+	+	++	++
Sexual crimes	_	+	++	_	_
Nonsexual crimes	_	+	_		
Heterosexual outlet			_	-	+
Heterosexual desire and					
lack of disgust		-	+	+	++
Homosexual outlet	+	+	+	++	
Homosexual desire and					
lack of disgust		+	+	+	
Cross-dressing	+	++	_		_
MMPI $t > 70^{b}$	2, 5, 7, 8	4,5	2,5	5	
16 PF elevations ^c	I, B−, H	I, B-			
Suicide tries	+		_	_	
Suicidal thought	++	++	+		

Table IV. Significant Differences in Clinical Group Profiles^a

than HOP. MAL and FEM did not differ significantly, although both groups scored highest.

Analysis of the 16 PF produced three significant results: factor B, Intelligence ($F=3.289,\ p<0.015,\ \eta=0.114$); factor H, "Shyness" ($F=5.008,\ p<0.002,\ \eta=0.164$); and factor I, "Masculinity-Femininity" (for all 16 PF scales, $F=6.924,\ p<0.001,\ \eta=0.214$, multivariate $F=1.837,\ df=68,339.81,\ p<0.001$), 64.48% correct assignment to own group, 84.11% correct for controls vs. patients. While differences on I were similar to the MMPI Mf scale, and factor B (Intelligence) reflects the pattern of results for IQ above, they were slightly less pronounced. Factor H represents "shyness" and MAL scored significantly more shy than CON (30.84% correct assignment to own group, 66.35% for controls vs. patients). There were no other significant differences.

The MAL group presented on the MMPI as less emotionally stable, and these results were supported by two biographical questionnaire items related to suicide. The MAL group thought significantly more about suicide (mean 3.70 thoughts; F = 10.123; df = 4, 94; p < 0.001; $\eta = 0.301$) and attempted

 a_{-} , Low frequency or absence of a behavior; +, its presence. There are four levels indicated: --, --, +, and ++.

b2, Depression; 4, Psychopathic Deviate; 5, Masculinity-Femininity; 7, Psychasthenia; 8, Schizophrenia.

cI, Toughmindedness (masculinity-femininity); B-, Less Intelligent; H, Withdrawn Schizothymia (shyness).

suicide most (mean 1.00 attempts; F = 5.607; df = 4, 99; p < 0.001; $\eta = 0.185$). The other four groups did not differ significantly in suicidal thoughts (range means 0–1.60 thoughts) but did differ in suicide tries. CON and HOC did not differ from each other (M 0.0 and 0.1 tries) but were both significantly lower in tries than MAL (M 1.0) and FEM (M 0.7 tries). HOP (M 0.2 tries) was in between. A summary of group differences appears in Table IV.

DISCUSSION

It appears that Stoller's (1973) "uneasiness" over readily available surgery and poor assessment of transsexuals was substantiated in this study. The results support the findings of Hoenig et al. (1970) that transsexualism is associated with both emotional disturbance and antisocial tendencies. A subgroup of transsexuals, MAL, mainly showed clear emotional disturbance and incongruities in their sexual behavior. Surgery for such patients would appear unwarranted. However, one of the transsexual groups, FEM, would appear to be mainly antisocial. Moreover, both groups are not different in "femininity," at least as measured by the MMPI and 16 PF. It is therefore difficult at present to use "the most feminine," psychometrically measured, as a criterion alone for approval of sex-change surgery. The "living as a female" criterion (Money and Green, 1969) is more satisfactory and sorts out the more pathological MAL group. Both groups showed some tendency to adjust to the heterosexual male role by marrying a female at some time. This may reflect gender role confusion as Person and Ovesey (1974) suggested, or social convenience.

The results were also in agreement with those of Freund et al. (1974a,b,c) that femininity was a key factor in male transsexualism. The femininity scales (Mf and I) best differentiated the transsexuals from other groups. However, Mf appeared in two personality constellations in the present study. The MAL group was very feminine but there was considerable confusion about gender identity, as with Person's and Ovesey's primary transsexuals, and they showed incongruities in sexual behavior. This group, perhaps because of a long-standing psychotic process, has been unable to "imprint" or learn one sex role adequately and perhaps the patients were attached to both female and male sex roles. Clinically, such individuals confuse dependency feelings and lack of aggressiveness in social interaction, with femininity in sexual behavior per se. Resolution of these problems may reduce the need for sex-change surgery.

The second constellation, FEM, related femininity to antisocial tendencies. One is tempted to draw parallels with criminals such as thieves who not infrequently are involved in antisocial sexual behavior. Such FEM patients, like many criminals, have closed minds about their own behavior. They present the diagnosis and the solution to the problem, namely, surgery. They feel nature and/or society has made a mistake which surgery can correct. The authors'

impression is that they are unaccepting of social and sex roles in general and surgery may not substantially alter that state of affairs. One may also argue at this point that the emotional disturbance of the MAL group and the antisocial tendencies of the FEM group are coincidental to transsexualism. This cannot be ascertained from the present study but is an important consideration.

Clinical homosexual patients (HOP) were similar in personality profile to the emotionally disturbed transsexual group (MAL) but had more sexual offenses and were less disturbed. They were dissimilar from the nonclinical homosexual group, who were much more like the heterosexual control group, sexual behavior excepted. Homosexuality per se appears to be associated only with increased femininity to some degree, whereas transsexualism may involve pathology of other personality dimensions as well. The type and extent of pathology seem to be important considerations for future work with transsexuals since a consideration of degree of femininity alone is an inadequate criterion for studying the problems encompassed by transsexualism.

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