

Personality Assessment in Gender Dysphoria: clinical observation in psychopathological evidence

Salvatore Settineri¹, Emanuele Maria Merlo², Antonio Bruno¹,
Carmela Mento¹

¹ Department of Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Italy

² Psychological Doctor, University of Messina, Italy

Email Corresponding author: manuzips@gmail.com

Abstract

Gender Dysphoria is a condition of great distress and mental suffering associated with a strong identification with the opposite sex than biological birth. The literature shows that there is a historical account of the evolution of the disorder and that the different approaches to clinical reality, generate considerations that also depend on the use of study methods.

Method: Twentytwo subjects, diagnosed with gender dysphoria, aged between 18 and 47 years, studied through clinical and content scales of MMPI-2 questionnaire, to highlight the presence psychopathological indices.

Results: Findings in the descriptive analysis shows that the majority of patients do not present a prevalence of psychopatology, with the exception of Pa scale. In differential terms are highlighted scraps with male predominance in the Fear scale and female prevalence in the ASP scale. As regards the frequencies, there is female predominance in ANG and Pd scales.

Conclusions: The study suggests some scientific elements related to clinical practice with Gender Dysphoria, which take into account the meant of questionnaire's use for subject's personality study.

Keywords: Personality Assessment in Gender Dysphoria.

Introduction

Clinical practice and the related aspects, always put us in front of issues related to methodologies and what through them, evidence suggests the lives of the subjects. A particular attention to diagnostic and testing practices, questions about the possibility of understanding the reality of the subjects, arise spontaneously. Some aspects of individuals' reality may emerge or be omitted from the prerogatives of the psychometric practices, and in reference to the state, one wonders what really emerges from data on living conditions as those of Gender Dysphoria. Our commitment to that effect, makes us wonder about what emerges from the practice of the personality test MMPI-2, compared to diagnostic reality complex, as Gender Dysphoria.

The term Gender Dysphoria is used for subjects who show a strong and persistent cross-gender phenomenon of identification and a discomfort with their anatomical sex. This is accompanied by a sense of inappropriateness in the gender role of the sex at birth, manifested through a concern and desire to change their sexual characteristics, as well as the conviction of being born in the wrong sex.

In the DSM-5, the Gender Identity Disorder (GID) undergoes a major change compared to the DSM-4, with the appearance of the term of Gender Dysphoria, intended as a clinical problem not focused on the identity itself, so much so that the account falls on the affective and cognitive discomfort in relation to gender assigned (Signorelli, 2014). The tenth edition (ICD-10), still lists transsexualism as a diagnosis in its own right (WHO 1992). For gender identity, Rogers (2000) considers the sex to which a subject feels to belong. According Simonelli (2002) it is a perception-unified and persistent of themselves, or self-identification as belonging to the male or female gender.

The perception of one's sex turns out to be a fundamental component of human identity. The role of identity considers all expectations and behaviors, occupations emotional reactions and cognitive approaches imposed directly or indirectly by the society (Beemer, 1996 Simonelli, 2006). Sexual orientation indicates the sex to which a man or a woman is sexually attracted (Simonelli, 2006) When the sexual identity, gender identity, gender role, and therefore sexual behavior and social recognition are not the same, gender identity and their affective, psychological and relational experiences, may have different combinations (Simonelli, 2002, 2006). In this sense, the nonconforming experience, reflects the experiences of dysphoric subjects, refers precisely to the primary and secondary sexual characteristics, respectively at birth and from development (Valerio et al. 2014).

The diagnosis of Gender Dysphoria, is mainly based on the basis of clinical information, such as the reasons for the request, nonconforming feelings and the case history, from childish behavior, as well as for family history and sexual orientation (Michel et al, 2002). It does not refer directly to the results of psychological testing, but the fact remains that the tests can be considered as the guarantor of understanding of the subject's personality. Issues related to the psychopathology associated with gender dysphoria, are suggested by extensive literature ; specifically our interest shall cover the utilization the MMPI-2, used in the presence of dysphoric subjects.

Several studies report in conclusion the presence or absence of psychopathology associated with gender dysphoria and as in this case the particular interest focuses on the use of the MMPI-2, as suggested in the study of Michel et al (2002). In this study and in terms of psychometric results at different scales, the work showed it was reported increase of rate scales such as Pd, Sc, Hy (Hoenig, Kenna, & Youd, 1970; Stinson, 1972; Finney, Brandsma, Tondow, & the Maestre, 1975; Langevin, Paitich, & Steiner, 1977; Hunt & Hampson, 1980; Beatrice, 1985).

However various studies suggested that the psychopathological dynamics related to MMPI-2 protocols of dysphoric subjects, did not have strong psychopathological connotations (Hoenig & Kenna, 1974; Rosen, 1974; Ro- back, Strassberg, McKee, & Cunningham, 1977; Tsushirna & Wedding, 1979; Bodlund & Armelius, 1994; Caron & Archer, 1997; Miach, Berah, Butcher, & Rouse, 2000) ; there are

strong evidence solely to scale Mf (Gil, E. Gómez, et al, 2005 Tsushima y Wedding, 1979; Hunt y cols., 1981; Cole y Cols, 1997; Miach y Cols, 2000). Higher levels of psychopathology associated with subjects referred for diagnosis of Gender Dysphoria, would instead result, again through the use of the MMPI-2, in those individuals who for various reasons, were not eligible for sex reassignment surgery, defined GIDAANT (Michel et al, 2002). The same through a study of Miach et al (2000), showed a surplus in the score D, Sc scales, DEP, PK and P, as a strong index of depression, emotional distress, and chronic maladjustment. As mentioned above, the question concerns the possibility of understanding what emerges from the study of the MMPI-2 protocols, that have been produced during our clinical experience, related to psychopathology that could accompany the Gender Dysphoria.

Method

The observation group is composed of 22 subjects aged between 18 and 47 years, with male predominance (M = 54.4%). The psychodiagnostic assessment is required before starting early hormonal treatment and sex reassignment surgery. The study focuses on descriptive and inferential data concerning the MMPI-2 personality questionnaire. In particular the study focused the possibility of the presence of psychopathology associated with Gender Dysphoria, suggested by the personality test amounts.

Statistical analysis

Descriptive statistics were used to summarize the data obtained from the study. Continuous data are expressed as the mean $\pm$ SD (standard deviation) and significant differences between groups were assessed using the Mann-Whitney U-test for two independent samples; non-continuous data are expressed as percentages and the comparison between the study groups was performed by using the χ^2 -test. A significance value of $p < .05$ was chosen and the statistical analysis was performed with Statistical Package for the Social Sciences - SPSS 16.0 software (SPSS Inc, Chicago, IL, USA).

Results

A total of 22 subjects (Males=12; Female=10), aged between 18 and 47 years, were included in the study, according to inclusion and exclusion criteria.

Tables 1 and 2 show descriptive statistical analyses of the psychometric instrument applied in total sample. Regarding MMPI-2 Clinical and Content scales, mean scores were within the normal range (T-score ≤ 65) with the exception of "Pa – Paranoia" (mean $\pm$ SD = 68 ± 12.67). Concerning the frequencies (expressed in percentages) of subjects who reported scores in the clinical range (T-score ≥ 65), MMPI2 Clinical and Content scales most represented were "Mf - Masculinity/Femininity" (59.1%), "Pa – Paranoia" (54.5%), "Sc – Schizophrenia" (50%), and "ANX - Anxiety" (50%).

Tables 3 and 4 show the differences in MMPI2 Clinical and Content scales mean scores between male and female groups: significant gender differences were found in "FRS – Fears" ($U = 26.500$; $p = .025$), higher in males, and in "ASP - Antisocial Practices" ($U = 23.000$; $p = .014$), higher in females. The frequencies (expressed in percentages) of subjects who reported scores in the clinical range (Tables 5 and 6), statistically significant differences among groups emerged at "Pd - Psychopathic Deviate" ($\chi^2 = 4.426$; $p = .035$), "ANG – Anger" ($\chi^2 = 4.774$; $p = .029$) and "ASP - Antisocial Practices" ($\chi^2 = 7.765$; $p = .005$), all most represented in females.

Discussion

The results obtained by statistical analysis of the MMPI-2 protocols of Gender Dysphoric subjects, provides clear data, in accordance with the scientific literature. Various authors refers to the absence of significant pathological indices related to clinical and content scales scores of the MMPI -2 (Hoenig & Kenna, 1974; Rosen, 1974; Roback, Strassberg, McKee, & Cunningham, 1977; Tsushirna & Wedding, 1979; Bodlund & Armelius, 1994; Caron & Archer, 1997; Miach, Berah, Butcher, & Rouse, 2000).

How can it be inferred from the analysis of descriptive statistics results in fact, both the clinical than in those of content scales, there

are not pathological indices, except for the Paranoia scale, whose score is above the limit.

The most important indices from the statistical point of view, does not refer the descriptive analysis of the presence or absence of psychopathology associated with Gender Dysphoria, as to the significance level, which exceeds the threshold, respectively, in the differences of sexual gender and frequencies.

Regard to gender differences, the significantly different scales are the Fear scale, whereas males showed greater fear and instead the female group shows higher scores in Antisocial Practices scale. With regard to frequency, the statistically significant differences relate to the Anger scale and Antisocial Practices, where the majority group is in the female.

Conclusions

The study suggesting the absence of psychopathology in dysphoric subjects, leads us to the agreement with a literature and the new diagnostic perspectives related more to the discomfort of Dysphoria, rather than the distinct Identity psychopathology.

The commitment here addressed with particular reference to the study of the subject's personality and not only to the diagnostic practice, becomes an occasion for deepening and understanding of a reality, among other irreducible. The absence of unequivocal and clear psychopathology, suggested by the questionnaire scales, is not so much a confirmation of an inferential point of view, as an opportunity for sharing the experience and the theme of personal suffering, whose hope is transformation, for the achievement of a hoped wellness, whose process involves us in the clinical, scientific and the research of human sense.

Tab. 1 – MMPI2 Clinical Scales: mean scores and frequencies of subjects with pathological scores in total sample.

	Mean	Total sample (n=)		
		SD	n	%
Hs - Hypochondriasis	56.05	12.45	4	18.2
D - Depression	62.09	18.02	9	40.9
Hy - Hysteria	56.77	14.15	7	31.8
Pd - Psychopathic Deviate	60.91	9.59	8	36.4
Mf - Masculinity/Femininity	64.68	11.67	13	59.1
Pa - Paranoia	68.00	12.67	12	54.5
Pt - Psychasthenia	59.00	13.37	9	40.9
Sc - Schizophrenia	64.41	16.38	11	50
Ma- Hypomania	55.59	13.51	6	27.3
Si - Social Introversion	57.77	13.43	6	27.3

Tab. 2 – MMPI2 Content Scales: mean scores and frequencies of subjects with pathological scores in total sample.

	Mean	SD	Total sample (n=)	
			n	%
ANX - Anxiety	62.82	14.52	11	50
FRS - Fears	54.95	14.78	5	22.7
OBS - Obsessiveness	55.64	11.41	5	22.7
DEP - Depression	63.45	12.67	9	40.9
HEA - Health Concerns	60.82	13.99	8	36.4
BIZ - Bizarre Mentation	53.77	8.77	3	13.6
ANG - Anger	58.23	13.32	6	27.3
CYN - Cynicism	55.59	8.98	3	13.6
ASP - Antisocial Practices	56.23	12.13	5	22.7
TPA - Type A	55.86	9.55	3	13.6
LSE - Low Self-Esteem	54.86	13.93	6	27.3
SOD - Social Discomfort	60.45	14.83	9	40.9
FAM - Family Problems	60.18	10.58	5	22.7
WRK - Work Interference	58.82	16.33	7	31.8
TRT - Negative Treatment Indicators	56.00	11.14	5	22.7

Tab. 3 – MMPI2 Clinical Scales: mean scores in Males and Females subjects.

	Males (n=12)		Females (n=10)		Mann- Whitney U-test
	Mean	SD	Mean	SD	p
Hs - Hypochondriasis	56.17	14.27	51.10	9.02	.539
D - Depression	60.08	16.06	66.30	12.28	.771
Hy - Hysteria	58.08	14.59	39.70	7.87	.722
Pd - Psychopathic Deviate	60.42	8.26	55.90	10.62	.582
Mf - Masculinity/Femininity	66.00	10.42	64.50	20.76	.674
Pa - Paranoia	67.83	12.33	55.20	14.21	.872
Pt - Psychasthenia	61.25	12.34	61.50	11.42	.628
Sc - Schizophrenia	67.83	15.22	63.10	13.42	.314
Ma- Hypomania	54.17	14.75	68.20	13.73	.771
Si - Social Introversion	55.83	14.60	56.30	14.70	.346

Tab. 4 – MMPI2 Content Scales: mean scores in Males and Females subjects.

	Males (n=12)		Females (n=10)		Mann- Whitney U-test
	Mean	SD	Mean	SD	p
ANX - Anxiety	60.92	15.61	65.10	13.55	.628
FRS - Fears	61.08	14.36	47.60	12.16	.025
OBS - Obsessiveness	53.25	8.99	58.50	13.74	.381
DEP - Depression	61.17	13.67	66.20	11.45	.456

HEA - Health Concerns	61.17	16.26	60.40	11.55	.722
BIZ - Bizarre Mentation	53.08	9.90	54.60	7.65	.539
ANG - Anger	54.50	10.66	62.70	15.32	.203
CYN - Cynicism	53.50	9.69	58.10	7.78	.314
ASP - Antisocial Practices	50.67	10.26	62.90	11.14	.014
TPA - Type A	53.92	10.39	58.20	8.38	.314
LSE - Low Self-Esteem	53.75	14.33	56.20	14.09	.771
SOD - Social Discomfort	57.58	14.87	63.90	14.81	.254
FAM - Family Problems	60.17	11.17	60.20	10.43	.872
WRK - Work Interference	56.33	17.44	61.80	15.25	.418
TRT - Negative Treatment Indicators	54.25	10.06	58.10	12.53	.539

Tab. 5 – MMPI2 Clinical Scales: frequencies of subjects with pathological scores in Males and Females subjects.

	Males (n=12)		Females (n=10)		Chi – square test
	n	%	n	%	p
Hs - Hypochondriasis	2	16.7	2	20	.840
D - Depression	4	33.3	5	50	.429
Hy - Hysteria	4	33.3	3	30	.867
Pd - Psychopathic Deviate	2	16.7	6	60	.035

Mf - Masculinity/Femininity	8	66.7	5	50	.429
Pa - Paranoia	7	58.3	5	50	.696
Pt - Psychasthenia	5	41.7	4	40	.937
Sc - Schizophrenia	7	58.3	4	40	.392
Ma- Hypomania	3	25	3	30	.793
Si - Social Introversion	3	25	3	30	.793

Tab. 6 – MMPI2 Content Scales: frequencies of subjects with pathological scores in Males and Females subjects.

	Males (n=12)		Females (n=10)		Chi – square test
	n	%	n	%	p
ANX - Anxiety	5	41.7	6	60	.392
FRS - Fears	4	33.3	1	10	.193
OBS - Obsessiveness	1	8.3	4	40	.078
DEP - Depression	4	33.3	5	50	.429
HEA - Health Concerns	4	33.3	4	40	.746
BIZ - Bizarre Mentation	2	16.7	1	10	.650
ANG - Anger	1	8.3	5	50	.029
CYN - Cynicism	2	16.7	1	10	.650
ASP - Antisocial Practices	0	0	5	50	.005

TPA - Type A	2	16.7	1	10	.650
LSE - Low Self-Esteem	3	25	3	30	.793
SOD - Social Discomfort	4	33.3	5	50	.429
FAM - Family Problems	2	16.7	3	30	.457
WRK - Work Interference	3	25	4	40	.452
TRT - Negative Treatment Indicators	1	8.3	4	40	.078

References

American Psychiatric Association. (2013). DSM 5. American Psychiatric Association.

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders DSM-IV-TR fourth edition (text revision).

Beatrice, J. (1985) A psychological comparison of heterosexuals, transvestites, pre-operative transsexuals, and postoperative transsexuals. *Journal of Nervous and Mental Disease*, 173, 358-365.

Beemer, B. R. (1996). Gender dysphoria update. *Journal of psychosocial nursing and mental health services*, 34(4), 12-19.

Bodlund, O., & Armelius, K. (1994) Self image and personality traits in gender identity disorders: an empirical study. *Journal of Sex and Marital Therapy*, 20, 303-317.

Butcher, J. N. (1989). *Minnesota Multiphasic Personality Inventory (MMPI)*.

Caron, R. G., & Archer, R. P. (1997) MMPI and Rorschach characteristics of individuals approved for gender reassignment surgery. *Assessment*, 3, 229-241.

Finney, I. C., Brandsma, J. M., Tondow, M., & Le Maestre, M. A. (1975) A study of transsexuals seeking gender reassignment. *American Journal of Psychiatry*, 132, 962-964.

Hoenig, I., Kenna, J., & Youd, A. (1970) Social and economic aspects of transsexualism. *British Journal of Psychiatry*, 117, 163-172

Hoenig, J., & Kenna, J. (1974) The nosological position of transsexualism. *Archives of Sexual Behavior*, 3). 273-287.

Hndt, D., & Hajapson, J. (1980) Follow-up of 17 biologic male transsexuals after sex-reassignment surgery. *American Journal of Psychiatry*, 137, 432-438.

Langmin, R., Pntich, D., & Steiner, B. (1977) The clinical profile of male transsexuals living as females versus those living as males. *Archives of Sexual Behavior*, 6, 143-154.

Miach, P., Berah, E., Butcher, J., & Rouse, S. (2000) Utility of the MMPI-2 in assessing gender dysphoric patients. *Journal of Personality Assessment*, 75, 268-279.

Michel, A., Ansseau, M., Legros, J. J., Pitchot, W., Cornet, J. P., & Mormont, C. (2002). Comparisons of two groups of sex-change applicants based on the MMPI. *Psychological reports*, 91(1), 233-240.

Roback, H. B., Strassberg, D., Mckee, E., & Cunnigham, J. (1977) Self concept and psychological adjustment differences between self-identified male transsexuals and male homosexuals. *Journal of Homosexuality*, 3, 15-20.

Rogers L., (2000), *Sesso e cervello*, Enaudi, Torino.

Rosen, A. (1974) Brief report of MMPI characteristics of sexual deviations. *Psychological Report*, 35,73-74.

Signorelli, M. S. (2014). I disturbi sessuali nel DSM 5. Aspetti relazionali tra vecchie e nuove diagnosi. *Quaderni di Gestalt*.

Simonelli C. (a cura di) (2002), *Psicologia dello sviluppo sessuale e affettivo nell'arco di vita*, Carocci, Roma

Simonelli, C., Rossi, R., Petruccelli, I., & Tripodi, F. (2006). Identità di genere e sviluppo sessuo-affettivo: fattori di rischio e percorsi atipici nell'infanzia e nella preadolescenza. *Quale psicologia*, 76.

SPSS Inc. (2007). SPSS 16.0 for Windows.

Stinson, B. (1972) A study of twelve applicants for transsexual surgery. *The Ohio State Medical Journal*, 68, 245-249.

Tsushima, W. T., & Wedding, D. (1979) MMPI results of male candidates for transsexual surgery. *Journal of Personality Disorders*, 43, 385-387.

Valerio P., Scandurra C., Amodeo A. L., *Appunti sul genere. Ordine degli Psicologi di Napoli*, Vol 4, pp. 80.

World Health Organisation multiaxial version of ICD 10. Clinical descriptions and diagnostic guidelines. Geneva: WHO 1992.