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Investigating of personality characteristics (extroversion-introversion) and Early Maladaptive Schemas (EMS) in males and females with Gender Identity Disorder (GID)

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Abstract

Research into the comparison of psychological disturbances and as well as on personality Characteristics in Gender identity disorder yielded mixed results , with different patterns for MF and FM transsexual subjects. We investigated personality characteristics and Early Maladaptive Schemas differences in MF and FM transsexuals. Early Maladaptive Schemas (EMS) and personality characteristics were assessed by the Young Schema Questionnaire indexing 16 Early Maladaptive Schemas (EMS) and Eysenck personality Questionnaire, respectively; in 17 MF and 17 FM transsexual subjects (34 subjects). FM and MF groups demonstrated significant difference in multiple EMSs. MFs indicated more feeling of abandonment, aloneness, shame and social isolation in comparison with FM transsexuals, and experienced more intensive emotional deprivation and inhibition too. In addition, they identified themselves vulnerable to harm or illness. However, MF and FM transsexuals didn`t show significant difference in extroversion-introversion trait. according to these findings , gender plays an important role in development of special EMSs in people with GID, specially in men, and MFs are more vulnerable and less adjustable in comparison with FMs.

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1. Introduction

Gender identity disorder (GID) is characterized by a strong and persistent identification with the opposite sex and discomfort with one's own sex (American Psychiatric Association, 1994). Persons who experience persistent discomfort with their biologic sex or with the gender role of that sex (American Psychiatric Association [APA], 2000) and who display a strong and persistent cross-gender identification can be diagnosed with transsexualism(APA, 1980, 1987; World Health Organization [WHO], 1992) or gender identity disorder (GID; APA, 1994, 2000). The defining characteristic of GID is gender dysphoria which includes discomfort with the individual's gender role and a wish to get rid of their sexual characteristics and to acquire the sexual characteristics

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of the other gender(Menvielle, Gomez-Lobo,2011).Compared with many other psychiatric disorders, GID is rare, with an estimated worldwide lifetime prevalence of 1:12,900 to 1:35,000 for MFs, and from 1:33,000 to 1:100,000 for FMs (De Cuypere et al., 2007, Gomez-Gil, Vidal-Hagemeuer, & Salamero, 2009), but much higher rates have been reported in various countries (ZuckerKJ&LawrenceAA,2009). It is important to consider that transsexuals cannot be treated as a homogenous group. Specifically, several researchers identified differences between the psychological and social adjustment of MF and FM transsexuals, which may account for some of the contradictions (Simon, Zsolt, Fogd, Czobor,2011). FMs exhibit fewer symptoms of mental distress; more stable relationships both pre- and post-surgery; and have more realistic expectations of sex-reassignment surgery (SRS) than MFs (De Cuypere, Jannes, & Rubens, 1995; Landen, Walinder, & Lundstrom, 1998).In addition, FMs have marriage less often prior SRS, are more likely to have sexual relationships according to their gender identity present at younger age (Gomez-Gil et al., 2009). These findings suggest that FM transsexuals are socially and psychologically better adjusted than MFs, albeit there are some contradicting results, indicating no difference in psychiatric comorbidity (Cole,Boyle,Emory, & Meyer, 1997; Hepp et al., 2005) or even lower psychological functioning in FMs (Bodlund et al., 1993; Smith, van Goozen, Kuiper, & Cohen-Kettenis, 2005). Compared to control females, MF transsexuals showed higher activation in orbital and right dorsolateral prefrontal regions and lower activation in the left prefrontal gyrus. FM transsexuals did not differ from either the MF transsexual or control groups (Carrillo,Gomez-Gil ,Rametti, Carme Junque, Gomez,Karadi ,Segovia ,Guillamon,2009). The high incidence rate of suicidal ideation exist among both MF and FM GID patients (MF, 74.6%; FM, 70.4%). The frequency is very high among all age groups or all patients grouped by age at onset or level of education (Terada, Matsumoto, Sato, Okabe, Kishimoto, Uchitomi, 2011).

To date, little attention has been paid to the differences between male and female transsexuals personality traits or those elements of self-concept which may underlie the phenomenological differences(Simon, Zsolt, Fogd, Czobor,2011).In addition, it remains unexplored whether MF and FM transsexuals also differ in their core beliefs or schemas guiding their conceptualizations of themselves and relations to others.

Young recently revised the schema concept, emphasizing early maladaptive schemas (EMSs) as key structures in the development of psychopathology (Young, 1995). EMSs are defined as stable, trait-like, enduring beliefs about oneself and the world which are rooted in early childhood experiences (Young et al., 2003). Subjects with GID on multiple EMSs compared to nontranssexual subjects, indicating feelings of isolation, emotional deprivation and an urge to meet others' needs, with MF transsexuals conceptualizing themselves also as more vulnerable and deficient than controls. Parenting experiences of transsexual subjects were characterised by increased maternal dominance, emotional abuse and neglect compared to controls. Both MF and FM transsexuals were made felt that in areas of achievement they will inevitably fail (Simon, Zsolt, Fogd, Czobor, 2011).

Finally, because of recent focusing researches on biological differences between MF and FM transsexuals, and neglect to psychological differences, particularly personality traits and with regard to the role of temprature in development of EMSs, we required to survey Extraversion–Introversion trait and EMSs in males and females with GID. The goal of current study is comparing EMSs and Extraversion–Introversion between males and females with Gender Identity Disorder.

2. Methods

2.1. Participants

A total 34 subjects were included in the study, involved in 17 MF (biological males diagnosed with GID) and 17 FM transsexual subjects (biological females diagnosed with GID) according to DSM-IV criteria, at the Welfare organization of Tehran. The diagnostic status was assessed by trained psychiatrists, in Iran psychiatric institute. Subjects were selected in available sampling method. They were referenced to Welfare organization by Iran psychiatric institute, in order to request SRS's subvention. Participation in the study was voluntary, with no incentives offered. All subjects gave written informed consent to participate in the study prior assessment and their permission to use the data for research purposes.

2.2. Measures

2.2.1. Background and demographic information

subjects were administered a short questionnaire to obtain basic background information, history of SRS and sex orientation and demographic information , such as age, education, birth order were gathered, which are shown in table 1.

Table 1. Basic Descriptive Characteristics of the study Groups

	MF(N=17)		FM(N=17)		Differences among groups		
	Mean %	**SD**	**Mean%**	**SD**	**Test statistic**	**df**	**p-value**
Age	25.64	3.67	20.70	4.39	3.55[a]	32	0.433
Education = Diploma	0.00		58.82				
Education<Diploma	100		41.18		14.167[b]	1	0.00
First offspring	58.8		35.29				
Last offspring	41.1		64.17		1.88[b]	1	0.16
Homosexual	70.58		0.00				
Heterosexual	29.42		100		5.86[b]	1	0.015

a; Independent – Sample T Test b; X^2 (Chi Square Test)

2.2.2. Young Schema Questionnaire

The Young Schema Questionnaire-Short Form (YSQ-S) (Young & Brown, 1994) is a 75-item questionnaire used to assess 14 early maladaptive schemas (EMSs) in 5 area; (1) Disconnection and Rejection, (2) Impaired Autonomy and Performance, (3) Impaired Limits, (4) Other-Directedness, and (5) Over vigilance/Inhibition. Participants rated each item on a 6-point Likert scale (1 = completely untrue of me, 6 = describes me perfectly). The YSQ is a reliable and valid measure of negative self-schemas. The YSQ-S is comprised of fifteen scales each including five items. The YSQ-S has well-established subscale internal consistency (Schmidt, Joiner, Young, & Telch, 1995; Waller, Meyer, & Ohanian, 2001).

2.2.3. Eysenck Personality Questionnaire

In order to measure the studied variable, Extraversion–Introversion , we used the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975), which includes a total of 75 items, 24 for the Neuroticism scale, 24 for Extraversion–Introversion, and 9 for lie scale .This scale performs without time limitation and subjects is demonstrated to study it carefully, and for each one of instances select one of responses “Yes” or “No”, which it’s more identifying her/his sensation and operation .In substances related to Extraversion-Introversion, high scores are demonstrated extraversion and low scores are showed introversion (8 score and lower introversion , 17 score and higher extraversion)(Esenck,1978). We used its Persian version , which its reliability is obtained by Barahani 1949, and reliability of extraversion is 0.76 , and Neuroticism is 0.84(Alipur,1993).

3. Results

3.1. Demographic and basic descriptive characteristics of the study groups

Basic descriptive characteristics of the study groups are summarized in Table 1. With regard to age, a significant difference exist between MF and FM transsexuals ($T=3.55$, $df=32$, $P=0.433$) , as mean of age in MFs (25.64) is higher than FMs(20.70). Also, there was a significant difference between the groups regarding the level of education ($X^2=14.167$, $df=1$, $P=0.00$). As shown in Table 1, MF transsexuals were more educated than FM transsexuals as justified by transcend of mean of age in MF group rather FM group(Mean=25.64), because FMs are in age of

diploma degree(Mean=20.70). With regard to birth order, no significant differences indicated between study groups(X^2=1.88, df=1, P=0.16),also none of participants were middle offspring. In continuance, with regard to sexual orientation, there was a significant difference between the groups (X^2=5.86, df=1, P=0.015), all of FMs have heterosexual orientation, however majority of MFs (Mean=70.58) are homosexual.(Refer to table 1).

3.2. Personality

The X^2 analysis indicated no significant overall difference among the two groups using Extraversion–Introversion domain of the Eysenck Personality Questionnaire (pearson=1.05; sig=0.303; df=1; N=34). X^2 procedure for comparisons didn't show a statistically significant difference ($p < 0.05$) for the MF transsexuals vs. FM transsexuals. Therefore, MF and FM transsexuals in regard to personality traits didn't show a statistically significant difference. Results are summarized in table 2.

Table 2. Extraversion–Introversion differences between Male-to-Female, Female-to-Male groups by X^2 (Chi Square Test)

	Value	**df**	**Sig.**	**N**
Extraversion–Introversion	1.05[a]	1	34	0.303

a; Lack of difference between MF and FM transsexuals groups

3.3. Early Maladaptive Schemas

The X2 analysis indicated a significant difference among the two groups using domains Early Maladaptive Schemas of YSQ-S. The X2 analysis yielded differences among the study groups on the Emotion deprivation(X2=5.76 ; df=1 ; Sig=0.016), Abandonment/instability(X2=5.86; df=1; Sig=0.044), Social isolation/alienation(X2=8.24; df=1; Sig=0.004), Mistrust/abuse(X2=11.80; df=1; Sig=0.001), Defectiveness/shame(X2=7.40; df=1; Sig=0.017), Vulnerability to harm or illness(X2=8.81; df=1; Sig=0.007), Entitlement/grandiosity(X2=5.88; df=1; Sig=0.039), Subjugation(X2=5.10; df=1; Sig=0.024) and Unrelenting standards/hypercriticalness(X2=14.16; df=1; Sig=0.000). Refer to table 4. According to table 3, MF transsexuals earned higher scores in all of above schemas than FM transsexuals. Dependency, Enmeshment/undeveloped self, Insufficient self-control/self-discipline and Self-sacrifice indicated in none of MF and FM transsexuals, therefore they weren't testable.

*Table 3.*Summarized Adaptive Table of EMSs

EMSs	MF(N=17)		FM(N=17)		Total	
	Schema+	Schema-	Schema+	Schema-	Schema+	Schema-
Emotion deprivation	70.60%	29.40%	29.40%	70.60%	23.50%	76.50%
Abandonment/instability	29.40%	70.60%	0.00%	100%	14.17%	85.30%
Social isolation/alienation	58.80%	41.20%	17.60%	82.40%	35.30%	64.70%
Mistrust/abuse	76.50%	23.50%	17.60%	82.40%	47.10%	52.90%
Defectiveness/shame	47.10%	52.90%	5.90%	94.10%	44.1	55.90%
Dependency	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Enmeshment/undeveloped self	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vulnerability to harm or illness	41.20%	58.80%	0.00%	100%	20.60%	79.40%
Entitlement/grandiosity	41.20%	58.80%	5.90%	94.10%	23.50%	76.50%
Insufficient self-control/self-discipline	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Self-sacrifice	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Subjugation	47.10%	52.90%	11.80%	88.20%	29.40%	70.60%
Emotion inhibition	29.40%	70.60%	29.40%	70.60%	29.40%	70.60%
Unrelenting standards/hyper criticalness	58.80%	41.20%	0.00%	0.00%	58.80%	41.20%

Schema+ ; Existence of schema, Schema– ; Lake of schema (according percentile frequency).

Table 4. EMSs differences between Male-to-Female, Female-to-Male groups by X^2 (Chi Square Test)

EMSs	Value	df	Sig.	N
Emotion deprivation	5.76[a]	1	0.016	34
Abandonment/instability	5.86[a]	1	0.044	34
Social isolation/alienation	8.24[a]	1	0.004	34
Mistrust/abuse	11.80[a]	1	0.001	34
Defectiveness/shame	7.40[a]	1	0.017	34
Dependency [c]				
Enmeshment/undeveloped self [c]				
Vulnerability to harm or illness	8.81[a]	1	0.007	34
Entitlement/grandiosity	5.88	1	0.039	34
Insufficient self-control/self-discipline				
Self-sacrifice [c]				
Subjugation	5.1	1	0.024	34
Emotion inhibition	0.000[b]	1	1	34
Unrelenting standards/hyper criticalness	14.16[a]	1	0	34

a; Existence of difference between MF and FM transsexuals groups
b; Lack of difference between MF and FM transsexuals groups
c; Schemas which observed in none of MF and FM transsexuals

4. Discussion

This study examined personality characteristics and dysfunctional core beliefs in MF and FM transsexual subjects, in order to identifying differences between them. We found that both MF and FM transsexuals in respect of Extraversion–Introversion are similar and there are no significant differences between them. Therefore, it could be claimed that MFs and FMs are similar in personality traits such as gregariousness, impulsivity and emotion seeking. This finding partially is inconsistent to Costa et al (2002) and Chapman, Duberstein, Sorensen and Lyness (2007), that discovered that in some dimensions of Extraversion gender differences exist, and with Poropat (2002) that indicated Extraversion was associated with gender but only when part of a model involving other variables, In Pos and hopefulness in particular. Our results partially support Costa et al(2001) that indicated men gain higher scores in some dimensions of Extraversion such as sensation seeking, and women in which dimensions such as openness to warmth, but gender differences in contiguous levels of Extraversion(as we based in current study) are less meaningful (Chapman, Duberstein, Sorensen and Lyness, 2007). It's may speculate that the lack of difference in terms of Extraversion–Introversion between MF and FM transsexuals might be due to Extraversion is a genetic trait which less affects by environment.

In addition, our results indicated differences between the two transsexuals groups in the EMSs area. Regarding Early Maladaptive Schemas, we found that both MF and FM transsexuals tend to describe themselves as someone that is rejected by their meaningful individuals and society, with feeling of mistrust and misuse, whose basic emotional needs are scarcely met, yet MFs report these experiences more intensive than counterpart women.

This indeed, may be due to failure experiences meantime effort to earn acceptation of other sex groups, insufficient family encountering with their disorder problem (as an incredible problem),and lack of empathy from family and society. Furthermore, exhibition of womanish gesture from mans, in our culture (Iranian) specially, are more likely to be blame and ridicule by family and society than exhibition of mannish gesture from women, thus it isn't away from mind that MFs have experienced multiple and more intensive sense of rejection. Further, MFs had more negative sight about themselves (deficiency and blaming) rather than FMs, which may partially enumerate to the more sensitivity to rejection and interpersonal relations. MF transsexuals also tend to describe themselves vulnerable, but none of FMs described themselves such.

Altogether, our results are consonant with those that described MFs as more distressed than FM transsexuals (Blanchard, Steiner & Clemmensen, 1985; Lothstein, 1984). In addition, our results support and also contradict delineated differences between the MF and FM transsexuals in regard to dysfunctional core beliefs, indicating feelings of isolation, emotional deprivation, with MF transsexuals conceptualizing themselves also as more vulnerable and deficient (Simon, Zsolt, Fogd, Czobor,2010).

According to our results, none of MF and FM transsexuals showed self-sacrifice schema, but we expected because of self-sacrifice is a stereotypical female characteristic, in FMs to be higher than MF transsexuals(Simon, Zsolt, Fogd, Czobor,2010); this incoherence may be because of transsexual's defensive state which pursued as a approach against social stigma that they are scrimmage with it.

5. Conclusion

The results showed that men and female with Gender Identity Disorder are different in aspect of Early Maladaptive Schemas. According to our findings and prior studies can to say that MFs are more social isolated and vulnerable, and have experienced more feeling of rejection, also have higher interpersonal sensitiveness rather than MF transsexuals.

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