

Attachment Styles in Sufferers of Gender Identity Disorder in Fars Province in 2014

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Abstract

Background: Gender identity disorder (GID) is considered as a very complicated clinical case and there are usually various variables in the inside-family-communication atmosphere.

Objectives: The aim of this study was to determine attachment styles in people with GID and compare them with normal people in Fars province, Iran.

Materials and Methods: This case-control study with accessible sampling was conducted in Fars province, Iran, in 2014 using 60 visitors to the Fars province forensics head office who had been diagnosed as having GID by the commission of psychology (the case group) and 204 individuals in dispose, whom psychologists diagnosed as having no psychological disorder and in synchronization with the sample group (controls). The demographic questionnaire and Collins and Read attachment style questionnaires were used in both groups. Data were collected and then analyzed using the SPSS software version 18, Kormogrov Smirnov's normality test and Pearson's correlation coefficient. A significance level of $P < 0.05$ was considered significant.

Results: Findings showed that the highest frequency (71%) in terms of secure attachment and the lowest frequency (0%) in terms of avoidant attachment were observed in patients with GID who had been operated and the highest frequency of avoidant attachment (62.1%) and the lowest frequency of secure attachment (0%) were observed in patients with GID who had not been operated.

Conclusions: According to the findings of this study, GID patients who have been operated are more secure in attachment styles than those who have not been operated, and there is a significant correlation between age, education and gender with attachment style among these individuals.

Keywords: Object Attachment, Style, Transsexualism, Sexual and Gender Disorder, Province, Shiraz

1. Background

One of the most important aspects of human identity is the gender identity (1), including one's perception and feeling about his sex and his related behavior, feelings and thoughts about sexual satisfaction (2), which is naturally congruous with one's anatomic gender (3).

Generally, the gender identity is formed via the learning process (4), and some components contribute to it as follows: parent attitudes, the existing culture, external reproductive organs and genetic factors (5). Sexual roles are taught to kids and he is encouraged to reinforce his gender-corresponding behavior (1, 4). The gender identity, however, takes the path incompatible with his biological gender and registered in their birth certificates. This is when an individual is said to be afflicted by the gender identity disorder (2).

The gender identity disorder (GID) is listed as one of the disorders on the statistical and diagnostic guide on DSM-

IV psychological disorders (3). A compatible strong desire for living and being accepted as a member of the opposite sex is a common characteristic among the GID afflicted (6). This disorder causes perturbation or a substantial disorder in occupational and social performance and other personal areas (7). They try to obtain the gender aspects of the other sex, regardless of its cultural privileges (8). Family factors like inordinate closeness to mother, abnormal psychosexual growth, mother or father absence, or parent dynamics such as mother's tendency towards having a girl might affect the GID development (9). The prevention of hard aggressive behavior by mother, parents' disability in eliminating the opposite sex behavior, parent inaccessibility and father's absence in the afflicted boys; and the father-daughter relationship and mother's disability and distance for girls are among the most important aspects for this disorder (8).

The emotional relationship domain is one of the most important areas where the GID afflicted individuals are

highly problematic in it. "Attachment" is one of such areas (10). Attachment is a deep emotional relationship one establishes with special people in his life so that one becomes delightful communicating with them and feels calm in stress besides them (11). The attachment behavior and their consequences are active over our lives and are not limited to childhood (12, 13). Attachment styles result from the responsiveness quality, sensitivity, and the attachment figure (mother) (14, 15); therefore, they play a fundamental role in one's social and personality evolution and the formation of his identity in his life (16). These styles include the following three: secure, anxious-ambivalent and avoidant insecure attachments (17). Those with secure attachment hold a responsive, supportive and positive self-concept. Those with an anxious-ambivalent attachment style think negatively about themselves and positively about others; they are attached. Those with an avoidant style lack certainty and intimacy in close relationships and are generally self-dependent (17, 18).

Evaluating the GID, some researchers emphasize the quality of childhood attachment relationships. For example, it is indicated that the insecure attachment patterns act as a risk factor for many psychological problems (19). As GID is among those disorders causing disorientation, the child development and his basic communications (attachment) can provide such a quality to cause this disorder (20), on the other hand, child's gender identity is formed in the primary sensitive developmental stages in relation to the family members (8), and familial and social support variables can be applied as a buffer against the emotional perturbations for the GID afflicted (21). Studying this variable (the attachment style) seems necessary to obtain applicable strategies for the GID afflicted (22). It might also provide precious information on its diagnostics and symptoms for treatment (23) and its results might also be applied in prevention and treatment programs (20).

2. Objectives

This study was therefore aimed to compare the attachment styles among the GID afflicted who have or have not gone under a surgical operation.

3. Materials and Methods

In this study, the attachment styles were studied among the GID afflicted in Fars province, Iran, in 2014. The required permissions were obtained from the Iranian legal medicine organization (LMO) at this province. The target population included three case and control groups as follows:

1) All the GID afflicted who have not undergone a surgical operation, sent to the certified psychiatrists for clinical by LMO evaluations in 2014 (case 1).

2) All GID afflicted who have undergone a surgical operation for changing their gender in the past 2 - 10 years after a psychologist and a psychiatrist have diagnosed them to be GID afflicted based on the disorder diagnostic criteria according to 1994 (DSM-IV) and 1988 (ICD-10) at the LMO from the psychiatry department of Fars province (case 2).

3) Normal people (the control group) selected making analogies with the case groups in age, gender, academic level and employment using convenience sampling. They have been evaluated by psychiatrists to lack any psychiatric disorder.

The clinical sample was selected using convenience sampling by referring to Fars LMO and its certified psychiatrists and psychologists from the qualified willing people. The non-afflicted sample was selected based on analogies with the clinical one from the qualified willing people using convenience sampling. The convenience sampling lasted 4 months. The sample size for all groups was determined based on the Morgan's table.

Required explanations were presented on research aim and the confidentiality of collected data was emphasized. The Helsinki Treaty articles on research ethics were observed (4). Having attracted the patients to participation and after obtaining their informed consent, each patient was given a questionnaire and the questionnaires were collected when filled out. The selection of equal male and female respondents was impossible under such limiting conditions. The researcher had inevitably to suffice only to the willing individuals for cooperation.

The criteria for entering the study included a certain diagnosis of GID in the patients, complete information on their profiles and their willingness to cooperate. The criteria for exiting the study were the lack of all before-mentioned criteria. Finally, due to the particularity of the samples, the entering and exiting criteria and other problems for accessing many patients and their willingness to cooperation, a total of 60 and 204 questionnaires were filled out by the case and control groups, respectively. A total of 31 people had changed their gender and 29 had not still undergone the gender changing surgical operation and were mostly in the group and hormone therapy stage (1).

In addition to demographic variables (age, gender, academic level, employment) the Collins and Read's questionnaire of adult attachment styles was also applied (22).

This questionnaire includes a self-evaluation of the communication and the self-description of the intimate attachments. It includes 18 items of 5-options in three subscales. It is applied for above-sixteeners. Its subscales in-

clude dependence (D), closeness (C) and anxiety (A) (22). I) Dependence measures the level up to which the testees depend on others. II) Closeness measures the individual's comfort in relationship, his emotional closeness and intimacy. III) Anxiety measures the fear from engaging in relationships during communications. The anxiety (A) subscale matches with the anxiety-ambivalent insecure attachment, and the closeness (C) subscale is a bipolar dimension putting the secure and avoidant descriptions in contrast, basically. Therefore, closeness (C) makes security matching with attachment, and the dependence (D) subscale can be considered as the opposite to avoidant attachment (24). The 5 options are scored 0 - 4. Adding the scores of each individual in six items makes his total attachment score. A number of items are scored inversely. The average validity coefficient of these instruments are reported as follows for different subscales: closeness (81%), dependence (78%) and anxiety (85%) (22). The Chronbach's alpha coefficients were obtained as follows for the secure, avoidant and ambivalent subscales for a 30-member sample: closeness (88%), dependence (90%) and anxious (92%). These coefficients indicate the internal sameness of the scale well (22). Chronbach's alpha has been above 0.80 in all cases in foreign research (25).

Data were analyzed using the Kormogrov Smirnov's test of normality to study the normal distribution of samples in the groups. Data were also analyzed using descriptive statistics (mean \pm standard deviation) and inferential statistics (Pearson's correlation coefficient) with SPSS software version 18. Chronbach's alpha is 0.711 and the significant level is considered $P < 0.05$.

4. Results

A total of 264 subjects entered this study. The GID afflicted included 31 (51.7%) of those undergone a surgical operation and 29 (48.3%) of those not undergone such an operation. The rest (204) members were normal ones.

Table 1 presents demographic variables (age, gender, academic level, employment) among the GID afflicted either undergone a surgical operation or not, and the normal people.

Table 2 presents the frequency distribution of attachment styles among the GID afflicted either undergone a surgical operation or not.

Table 3 presents the relationship between attachment styles and demographic variables (age, gender, academic level, employment) among the GID afflicted not undergone a surgical operation.

Table 4 presents the relationship between attachment styles and demographic variables (age, gender, academic

Table 1. Demographic Variables in People With Gender Identity Disorders (Operated and Not Operated), and Normal Ones^a

Demographic Variables	GID People (Operated)	GID People (Not Operated)	Normal People
Age, y			
Range	18 - 28	19 - 36	18 - 65
Mean \pm SD	25.23 \pm 4.544	23.21 \pm 3.144	29.42 \pm 8.637
Gender			
Male	22 (71)	8 (27.6)	103 (50.5)
Female	9 (29)	21 (72.4)	101 (49.5)
Employment			
Unemployed	5 (16.1)	13 (44.8)	49 (24)
Pupil	0 (0)	3 (10.3)	3 (1.5)
Student	1 (3.2)	3 (10.3)	41 (20.1)
Self employed	24 (77.4)	10 (34.5)	81 (39.7)
Employee	1 (3.2)	0 (0)	30 (14.7)
Education			
Below diploma	4 (12.9)	3 (10.3)	16 (7.9)
Diploma	11 (35.5)	7 (24.1)	34 (16.7)
Higher national diploma	2 (6.5)	3 (10.3)	15 (7.4)
Bachelor	7 (22.6)	9 (31)	42 (20.6)
Masters	4 (12.9)	1 (3.4)	28 (13.7)
PhD	1 (3.2)	0 (0)	0 (0)
Student	2 (6.5)	6 (20.7)	69 (33.8)
Total	31 (100)	29 (100)	204 (100)

^aValues are expressed as No. (%) unless otherwise indicated.

level, employment) among the GID afflicted undergone a surgical operation.

5. Discussion

Findings on age variable with its average being 24.25 ± 4.028 among the GID afflicted (either undergone a surgical operation or not) is consistent with Momeni Javeed and Shoakazemi (20) but not with Bayani (8) whose average age was 27.1. Regarding the gender variable, the participants included 30 males and 30 females. It is consistent with Movahed and Hoseynzade Kasmani (1) who have studied both genders, but not with Vaseq Rahimparvar et al. (2) who have studied the afflicted males and females, sepa-

Table 2. Frequency Distribution of Units in Sufferers With Gender Identity Disorders, Operated and Not-Operated, According to Attachment Styles^a

Score	Secure	Avoidance	Ambivalent
GID People (Operated)			
1.01 - 2	1 (3.2)	10 (32.3)	5 (16.1)
2.01 - 3	22 (71.0)	8 (25.8)	3 (9.7)
3.01 - 4	8 (25.8)	13 (41.9)	6 (19.4)
4.01 - 5	0	0	17 (54.8)
Total	31 (100.0)	31 (100.0)	31 (100.0)
GID People (Not Operated)			
1.01 - 2	0	3 (10.3)	6 (20.7)
2.01 - 3	16 (55.2)	18 (62.1)	6 (20.7)
3.01 - 4	12 (41.4)	7 (24.1)	10 (34.5)
4.01 - 5	1 (3.4)	1 (3.4)	7 (24.1)
Total	29 (100.0)	29 (100.0)	29 (100.0)

^aValues are expressed as No. (%).

rately. On the academic level, where they mostly held diplomas (30%) it is consistent with Vaseq Rahimparvar et al. (2) but not with Movahed (1) as most of his participants held degrees above diplomas (41%). On employment, it is consistent with Vaseq Rahimparvar et al. (2) where the participants mostly were in freelancing jobs (56.7%), it was consistent with Vaseq Rahimparvar et al. (2) were 34.6% of his participants were in freelancing jobs, and Yazdanpanah and Samadiyan (4) where 45.5% of his participants were salespeople, but not with Bayani (8) where 28% were in freelancing jobs is not consistent with Movahed (1) in that most of his participants (62.5%) were jobless.

Findings on the absence of a significant relationship between secure attachment and age was consistent with Sheffield et al. (26) and Nosrati et al. (27), but not with Simon et al. (28). It can be noted that the attachment style in child-mother relationship framework is formed in later months of the first year of life and is gradually established and continues. The primary attachment image is mother, and father often enters this domain later and less significance. Therefore, the mother attachment is formed first (29).

Mother's failure in making a responsive, sensitive and warm relationship in the first year causes permanent behavioral problems in her child. Any gaps in mother-child relationship can have a negative crucial effect on child's character and lead to somehow morbid disorders in the future (30). When the third year arrives, the dynamicities of the triangular parent-child relationships are at its highest point in the continuation process of the attachment

style. One of the characteristics of such relationships is the conflicts occurring with the same-sex parent and the tendencies occurring towards the opposite-sex parent in a psychodynamic viewpoint (29). Using the assimilating mechanism, also, one of the identified psychological consequences of solving the triangular conflicts is the assimilation of the child with his same-sex parent. The girl is assimilated to a mother who is the primary attachment image. On the other hand, the socialization process influences the emotions, perception methods, emotional interpretation and disclosure.

The absence of a relationship between age and secure attachment, however, indicates that parents are required by an individual at any age as a secure base. If one knows that someone is keeping us in mind and is worried about us acts as a securing base at any age. This does not occur, unfortunately, for our studied population or is not shown at least, because showing the opposite-sex behavior in the GID afflicted children heightens parents' abject and aloof behavior (10).

Findings on the lack of a significant relationship between the secure attachment and gender in the GID afflicted not undergone a surgical operation is consistent with Kerpelman et al. (31) and Valizadeh et al. (29), but not with Sarracino et al. (32) and Troisi et al. (33). It can be elaborated that as a need, attachment provides the first required biological preparations in attachment behavior at both sides (mother-child) regardless of the newborn sex. This occurs also with the GID afflicted, because they are born with a natural body and the opposite sex identity appears in their 2/3 years.

Findings on the lack of a significant relationship between the secure attachment and occupation is consistent with Pourebrahim et al. (34) but not with Vignoly et al. (35).

Elaborating this relationship, it can be said that families accept their child and meet his needs at the most desirable level. According to Rue, children in such families tend to jobs related directly to people. Otherwise, they always disregard their children and are mostly ignorant about meeting their children's primary psychological and physical needs. According to Rue, the cultivated children in such families mostly turn to jobs with no affinities with people and those jobs directly related to instruments. According to Rue's classification, the cultivated people in families with friendship, kindness, love and support backgrounds work in jobs with the primary tendency towards human beings. Those who tend to instrumental occupations were grown in families with aloof far-from-intimate relationships. According to Shiffer's pattern, the parents are kind and letting free, and according to Bamarind Patern, the parents are powerful and securing for the human tended people. The tended people to instrumental jobs such as

Table 3. Linkage Between Attachment Style and Demographic Variables in People With Gender Identity Disorders (Not operated)

Type of Attachment Style	Demographic Variable			
	Age, y	Gender	Education	Job
Secure				
Pearson's correlation	0.055	0.217	0.323	0.226
P value	0.775	0.259	0.087	0.238
Avoidance				
Pearson's correlation	0.269	-0.223	-0.479	-0.218
P value	0.159	0.245	0.009	0.256
Ambivalent				
Pearson's correlation	-0.130	0.069	-0.029	-0.227
P value	0.501	0.721	0.882	0.236

Table 4. Relation Between Attachment Styles and Demographic Variables in People With Gender Identity Disorders (Operated)

Type of Attachment Style	Demographic Variable			
	Age, y	Gender	Education	Job
Secure				
Pearson's correlation	0.090	-0.458	0.259	0.073
P value	0.629	0.010	0.159	0.698
Avoidance				
Pearson's correlation	0.064	-0.442	0.124	0.194
P value	0.733	0.013	0.507	0.259
Ambivalent				
Pearson's correlation	-0.421	0.434	-0.384	0.168
P value	0.018	0.015	0.033	0.366

physics are cultivated in families with probably dominant cold relationships. They are, in fact, categorized according to Shiffer's abject and Bamarind's letting free. He believes that conditions and family cultivation determine occupational activities (36). This lack of relationship might, however, be related to the type of studied population. Findings on the lack of a significant relationship between the secure attachment and academic level, contradict Valizadeh et al. (29) and Linver et al. (37). The later emphasized the role of family income level and parents' academic level on attachment formation. He mentioned that low levels of income and education in lower social classes might have permanent effects in the socio-emotional cognitive ability development of a child. Poverty often accompanies social isolation risks and the lack of enough care of the child.

Findings on the lack of significant relationship between avoidant attachment with age and occupation, and the relationship between ambivalent attachment with age,

gender, occupation and academic level are consistent with Vignoly et al. (35) and Mombeinina (38), but not with Troisi et al. (33) and Alizadeh (39).

Findings on the lack of a significant relationship between avoidant attachment and gender is consistent with Hatami and Ayvazi (40) and Di Ceglie (41), but not with Simon et al. (28) and Rekers (36).

The inverse significant relationship between avoidant attachment and education can be elaborated that the higher is the education the lower is the avoidant relationship. Despite searching in different sources, no similar studies were found to compare the findings. The results of this study might be a starting point for further studies. This finding can be elaborated on as follows: regarding that the avoidant attachment style refers to the interaction insecurity and the tendency to isolation, the higher the academic level goes, the higher the individual's social communications and responsibilities will be. They contra-

dict each other.

Some limitations might include the lack of cooperation by the GID afflicted due to the difficulty of making them trust. This might be due to the cultural context of the society and the lack of acceptance of such patients and sometimes the curiosity of people in identifying them. Their low interest in research works due to information abuse by some researchers, the disability to generalize findings due to convenience sampling and sampling in a province, which makes it difficult to generalize the findings to all GID afflicted.

It is suggested that other research be performed in the same name in other cities on this group, and also their birth rank and the number of their siblings be researched for this group. Moreover, it is recommended that the issue be investigated for Females to Males and Males to Females separately and the results be compared to each other.

5.1. Conclusion

As a general conclusion, it might be said that GID might accompany emotional issues and be related to their type of relationship in the family, their behavior and emotional relationship. The role of the created attachment is heightened in the family. Some factors such as parents' behavior, control and response to the action of these people can be mentioned, because family is the first social environment and individual is placed in it. If it behaves inappropriately towards an individual and expect him the opposite gender roles, an individual's viewpoint is also formed to be an opposite-sex one and he does the inappropriate gender role.

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Footnote

Authors' Contribution: The original idea of this study was developed by Ghasem Naziri. Nahid Mahmoodi and Mohammad Zarenezhad were responsible for collecting data and analyzing them and also for preparing the manuscript. Mohammad Zarenezhad and Ghasem Naziri were also responsible for drafting and revision of the manuscript.

References

- Movahed M, Hoseynzade Kasmani M. The relation of gender identity disorder and quality of life [in Persian]. *J Soc Welf*. 2011;**12**(44):111-42.
- Vaseq Rahimparvar SF, Musavi MS, Raisee F, Khodabandeh F, Bohrani N. Comparison of Life Quality of GID after Sex Change Operation with Ordinary Women in Tehran [in Persian]. *Women J Midwifery Infertility Iran*. 2013;**16**(74):10-9.
- Caplan Sadok B, Sadok Virginia A. Summary of Psychology. Behavioural Science-Clinical Psychology. 5 ed. Tehran, Iran: Arjmand Pub; 2012.
- Yazdanpanah L, Samadiyan F. Study of gender identity disorder emphasized the role of the family: a comparative study of patients in Kerman Welfare [in Persian]. *J Soc Welf*. 2011;**10**:120-40.
- Kooshan M, Vaqei S. Psychiatric Nursing, Mental Health [in Persian]. 5 ed. Tehran, Iran: Andishe Rafee; 2009.
- Okabe N, Sato T, Matsumoto Y, Ido Y, Terada S, Kuroda S. Clinical characteristics of patients with gender identity disorder at a Japanese gender identity disorder clinic. *Psychiatry Res*. 2008;**157**(1-3):315-8. doi: [10.1016/j.psychres.2007.07.022](https://doi.org/10.1016/j.psychres.2007.07.022). [PubMed: 17959255].
- Green R. Gender identity disorders. In: Sadock JS, Sadock JS, editors. Kaplan and Sadock's Comprehensive Textbook of Psychiatry. 9 ed. Philadelphia: Lippincott Williams and Wilkins; 2009. .
- Bayani F. Scale of GID in visitors to Khorasan Razavi Welfare Centre and Social Emergencies (Shahid Navab Safavi Tehran 2010) and its effective factors [Dissertation in Persian]. Mashhad, Iran: Ferdowsi University of Mashhad; 2010.
- Mojiri Nejad M. Review of effectiveness of group therapy with interpersonal approach (based on attachment) on adjustment to role of gender, anxiety-depression and self-esteem in men with GID [Dissertation in Persian]. Mashhad, Iran: Ferdowsi University of Mashhad; 2010.
- Besharat M, Tovalaian F, Lavasani M. Comparison of attachment styles in people with GID and normal people. *Forensic Sci*. 2012;**18**(2-3):89-97.
- Firoozabadi A, Abedi Z, Aliyari R, Zolfaghari B, Ghanizadeh A. Psychometric characteristics of the persian (farsi) version of attachment style questionnaire. *Iran J Med Sci*. 2014;**39**(6):506-14. [PubMed: 25429172].
- Simpson JA, Collins WA, Tran S, Haydon KC. Attachment and the experience and expression of emotions in romantic relationships: a developmental perspective. *J Pers Soc Psychol*. 2007;**92**(2):355-67. doi: [10.1037/0022-3514.92.2.355](https://doi.org/10.1037/0022-3514.92.2.355). [PubMed: 17279854].
- Erkan M, Gencoglan S, Akguc L, Ozatalay E, Fettahoglu EC. Attachment styles and psychopathology among adolescent children of parents with bipolar disorder. *Med Sci Monit*. 2015;**21**:1083-8. doi: [10.12659/MSM.893372](https://doi.org/10.12659/MSM.893372). [PubMed: 25877235].
- MacGregor EK, Grunebaum MF, Galfalvy HC, Melhem N, Burke AK, Brent DA, et al. Depressed parents' attachment: effects on offspring suicidal behavior in a longitudinal family study. *J Clin Psychiatry*. 2014;**75**(8):879-85. doi: [10.4088/JCP.13m08794](https://doi.org/10.4088/JCP.13m08794). [PubMed: 25098943].
- Sheinbaum T, Kwapil TR, Ballespi S, Mitjavila M, Chun CA, Silvia PJ, et al. Attachment style predicts affect, cognitive appraisals, and social functioning in daily life. *Front Psychol*. 2015;**6**:296. doi: [10.3389/fpsyg.2015.00296](https://doi.org/10.3389/fpsyg.2015.00296). [PubMed: 25852613].
- Edwards ME. Attachment, mastery, and interdependence: a model of parenting processes. *Fam Process*. 2002;**41**(3):389-404. [PubMed: 12395566].
- Verbeke WJ, Pozharliev R, Van Strien JW, Belschak F, Bagozzi RP. "I am resting but rest less well with you." The moderating effect of anxious attachment style on alpha power during EEG resting state in a social context. *Front Hum Neurosci*. 2014;**8**:486. doi: [10.3389/fnhum.2014.00486](https://doi.org/10.3389/fnhum.2014.00486). [PubMed: 25071516].

18. Deniz ME, Hamarta E, Ari R. An Investigation of Social Skills and Loneliness Levels of University Students with Respect to Their Attachment Styles in a Sample of Turkish Students. *Soc Behav Personal.* 2005;**33**(1):19–32. doi: [10.2224/sbp.2005.33.1.19](https://doi.org/10.2224/sbp.2005.33.1.19).
19. Nakash-Eisikovits O, Dutra L, Westen D. Relationship between attachment patterns and personality pathology in adolescents. *J Am Acad Child Adolesc Psychiatry.* 2002;**41**(9):1111–23. doi: [10.1097/00004583-200209000-00012](https://doi.org/10.1097/00004583-200209000-00012). [PubMed: [12218433](https://pubmed.ncbi.nlm.nih.gov/12218433/)].
20. Momeni Javeed M, Shoakazemi M. Comparison of personal traits of GID people and normal people. *Soc Res J.* 2011;**4**(13):81–94.
21. Gomez-Gil E, Zubiaurre-Elorza L, Esteva I, Guillamon A, Godas T, Cruz Almaraz M, et al. Hormone-treated transsexuals report less social distress, anxiety and depression. *Psychoneuroendocrinology.* 2012;**37**(5):662–70. doi: [10.1016/j.psyneuen.2011.08.010](https://doi.org/10.1016/j.psyneuen.2011.08.010). [PubMed: [21937168](https://pubmed.ncbi.nlm.nih.gov/21937168/)].
22. Mosavi Z, Ahghar G, Asadzadeh H. Effectiveness of group consultation on behavioural-cognitive consequences in alteration of pupils' attachment styles [in Persian]. *Dev Psychologist Iran Psychologist.* 2011;**8**(29):45–54.
23. Daadfar M, Yekeh Yazdandoost R, Daadfar F. Review of Personal Models in GID patients. *Forensic Sci.* 2009;**15**(2):69–99.
24. Yaghobi A, Mohagheghi H, Chegini A, Mohammadzadeh S. Relationship of Attachment, Breastfeeding and Weaning Styles with Communication Styles and Interpersonal Trust in Adulthood [in Persian]. *Sci J Ilam Univ Med Sci.* 2013;**22**(1):16–24.
25. Moayedfar H, Agha Mohammadian H, Tabatabaei M. Relationship Attachment Styles and Social Self-Esteem [in Persian]. *Psychol Studies.* 2007;**3**(1):61–72.
26. Sheffield A, Waller G, Emanuelli F, Murray J, Meyer C. Links Between Parenting and Core Beliefs: Preliminary Psychometric Validation of the Young Parenting Inventory. *Cognitive Ther Res.* 2006;**29**(6):787–802. doi: [10.1007/s10608-005-4291-6](https://doi.org/10.1007/s10608-005-4291-6).
27. Nosrati M, Mazaheri M, Heidari M. Evolutionary Review of Identity Basis with Secure Attachment Level of Young Boys (14, 16, 18 years) to Parents and Peers. *Family Studies.* 2006;**2**(5):35–53.
28. Simon L, Zsolt U, Fogd D, Czobor P. Dysfunctional core beliefs, perceived parenting behavior and psychopathology in gender identity disorder: A comparison of male-to-female, female-to-male transsexual and nontranssexual control subjects. *J Behav Ther Exp Psychiatry.* 2011;**42**(1):38–45. doi: [10.1016/j.jbtep.2010.08.004](https://doi.org/10.1016/j.jbtep.2010.08.004). [PubMed: [21074005](https://pubmed.ncbi.nlm.nih.gov/21074005/)].
29. Valizadeh S, Arshadi Bostan Abad M, Babapoor Kheiruldin J, Shameli R. Comparison of Attachment to parents of kindergarten and not kindergarten children of Tabriz. *Psychol Nurs.* 2013;**1**(1):10–8.
30. Bahadori MH, Jahanbakhsh M, Amiri S, Anisi J. Forecasting of Girl's Depression Symptoms From Mother's Attachment Style. *Behav Sci.* 2013;**6**(4):339–45.
31. Kerpelman JL, Pittman JF, Saint-Eloi Cadely H, Tuggle FJ, Harrell-Levy MK, Adler-Baeder FM. Identity and intimacy during adolescence: connections among identity styles, romantic attachment and identity commitment. *J Adolesc.* 2012;**35**(6):1427–39. doi: [10.1016/j.adolescence.2012.03.008](https://doi.org/10.1016/j.adolescence.2012.03.008). [PubMed: [22503899](https://pubmed.ncbi.nlm.nih.gov/22503899/)].
32. Sarracino D, Presaghi F, Degni S, Innamorati M. Sex-specific relationships among attachment security, social values, and sensation seeking in early adolescence: implications for adolescents' externalizing problem behaviour. *J Adolesc.* 2011;**34**(3):541–54. doi: [10.1016/j.adolescence.2010.05.013](https://doi.org/10.1016/j.adolescence.2010.05.013). [PubMed: [20547417](https://pubmed.ncbi.nlm.nih.gov/20547417/)].
33. Troisi A, Massaroni P, Cuzzolaro M. Early separation anxiety and adult attachment style in women with eating disorders. *Br J Clin Psychol.* 2005;**44**(Pt 1):89–97. doi: [10.1348/014466504X20053](https://doi.org/10.1348/014466504X20053). [PubMed: [15826346](https://pubmed.ncbi.nlm.nih.gov/15826346/)].
34. Pourebrahim T, Heidari J, Khushkonesh A. Link between child raising with Identity seeking methods and inclination of the youth to jobs. *Organ Employment Consultancy.* 2011;**3**(8):11–24.
35. Vignoly E, Croity-Belz S, Chapeland V, Fillips A, Garcia M. Career exploration in adolescents: The role of anxiety, attachment and parenting style. *Vocational Behav.* 2005;**67**:153–68.
36. Rekers GA, Mead SL, Rosen AC, Brigham SL. Family correlates of male childhood gender disturbance. *J Genet Psychol.* 1983;**142**(1st Half):31–42. doi: [10.1080/00221325.1983.10533493](https://doi.org/10.1080/00221325.1983.10533493). [PubMed: [6854278](https://pubmed.ncbi.nlm.nih.gov/6854278/)].
37. Linver MR, Brooks-Gunn J, Kohen DE. Family processes as pathways from income to young children's development. *Dev Psychol.* 2002;**38**(5):719–34. [PubMed: [12220050](https://pubmed.ncbi.nlm.nih.gov/12220050/)].
38. Mombeininia Y. Review of relation between attachment styles and identity with social adjustment in high school youth of Izeh City [Dissertation in Persian]. Marvdasht, Iran: Marvdasht Branch, Islamic Azad University; 2009.
39. Alizadeh M. Review of Relation between Family Cohesion with Identity in Gachsaran City High School Pupils [Dissertation in Persian]. Marvdasht, Iran: Marvdasht Branch, Islamic Azad University; 2012.
40. Hatami M, Ayvazi S. Investigating of Personality Characteristics (Extroversion-introversion) and Early Maladaptive Schemas (EMS) in Males and Females with Gender Identity Disorder (GID). *Procedia-Soc Behav Sci.* 2013;**84**:1474–80. doi: [10.1016/j.sbspro.2013.06.776](https://doi.org/10.1016/j.sbspro.2013.06.776).
41. Di Ceglie D. Gender identity disorder in young people. *Adv Psychiatr Treatment.* 2000;**6**(6):458–66. doi: [10.1192/apt.6.6.458](https://doi.org/10.1192/apt.6.6.458).