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# *The Role of Cognitive Schemata in the Prediction of Adjustment in Female Students with Symptoms of Oppositional Defiant Disorder*

Soheila Najafi<sup>1\*</sup> and Abbas Abolghasemi<sup>2</sup>

1-Department of psychology, Aradabil Branch, Islamic Azad University, Ardabil, Iran

2- The University of Ghilan, Rasht, Iran.

**Corresponding Author:** Soheila Najafi

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### ABSTRACT

This study aimed to determine the role of cognitive schemata in the prediction of adjustment in female students with symptoms of Oppositional Defiant Disorder. In this descriptive-correlational study, the population consisted of all female high school students with symptoms of Oppositional Defiant Disorder in the city of Ardabil (district one). The sample was a group of 180 female high school students with high scores on the Oppositional Defiant Disorder Checklist. Data were collected through the Young Schema Questionnaire- Short Form, the Adjustment Inventory for School Students and the Oppositional Defiant Disorder Checklist and analyzed via Pearson correlation coefficient and multiple regression analysis. The results indicated a significant relationship between cognitive schemata and the adjustment level of students with Oppositional Defiant Disorder ( $r=-0.23$ ,  $p>0.001$ ). Furthermore, the results of multiple regression analysis showed that %7.7 of variances in the students' adjustment level could be predicted by their cognitive schemata indicating the low predictive power of cognitive schemata for the determination of the adjustment level of students with Oppositional Defiant Disorder.

**Keywords:** *Cognitive Schemata, Adjustment and Oppositional Defiant Disorder.*

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### INTRODUCTION

The Oppositional Defiant Disorder (ODD) is one of the most common disorders of childhood and adolescence and one of the main reasons that children are referred to psychology clinics and counseling centers. The ODD is diagnosed when the symptoms of Conduct Disorder (CD), especially too much aggressiveness, are not observed in a child. Children, mostly boys, with ODD barely blame themselves for their social maladjustment. These children claim that irrational requests made by others are the cause of their oppositional behaviors (DSM-5, translated by Seyyed Mohammadi, 2014).

ODD is more common among boys before the age of puberty; thereafter, its ratio is expected to be the same in both sexes. In late childhood, environmental impacts or diseases such as mental retardation may cause oppositional behaviors such as defensiveness, anxiety and loss of self-esteem. Children with ODD usually refer to their oppositional behaviors as a logical reaction to irrational conditions. It seems that ODD inconveniences people around a child more than the child itself. The experts believe that there are probably two types of ODD: one is very much like the CD and includes specific symptoms such as fighting and bullying while the other is not very much like the CD and includes less aggression and antisocial traits (Pour Afkari, 2002). People with ODD are normally characterized by harassment of family members and low academic achievements (William, et al., 2007). Moreover, destructive behaviors, aggression and delinquency are other features of ODD in adolescents. ODD is related to other problems including Attention-Deficit/Hyperactivity Disorder (ADHD) (Kod Saljough, et al., 2003; Conder, et al., 2008), social isolation (Kone, 1997), depression, anxiety and school refusal (Hardev, et al., 2002), Personality Disorders (May & Bass, 2000), decreased psychological functioning (Harpold, et al., 2007), decreased pathological functioning (Vender et al., 2007),

Impulse Control Disorder (ICD) and drug tolerance (Gouzov, et al., 2007). ODD in childhood may lead to CD and antisocial behaviors in adulthood (Luber, et al., 2000). In other words, ODD is related to childhood and adulthood mental disorders as well as environmental and genetic factors (Boylan, et al., 2007).

Among the factors involved in the emergence of ODD, genetic or biological characteristics, the interactions of social and environmental conditions and ineffective parenting styles can be mentioned (Dicken, et al., 2005). Ineffective parenting styles negatively affect children's early relationships and may lead to stress and mental health problems. Freud (1935) suggested that disturbance in early relationships is the basis of consequent mental disorders (Sadouk & Sadouk, 2007; translated by Pour Afkari, 2009). The early relationships lead to the formation of psychological structures among which, schemata are the most profound structure (Asotiz, 2006). Young (2003) hypothesized that some schemata, especially those that are formed as a result of unpleasant experiences in early childhood, may constitute the core of personality and many other long-lasting disorders and termed them 'the primary non-adaptive schemata'. In a study, Morris (2010) found that the primary non-adaptive schemata are directly related to some problems and disorders such as CD, extreme anger, anxiety, sadness and feeling of guilt.

One of the variables that affect ODD is the cognitive schema. Young (2003) also assumed that some schemata, especially those that are formed as a result of unpleasant experiences in early childhood, may constitute the core of personality and many other long-lasting disorders and termed them 'the primary non-adaptive schemata'. The primary non-adaptive schemata are highly unproductive and pervasive themes or patterns about the self and others. Schemata are made of memories, emotions, cognitions and physical feelings that play a very influential role in people's well-adjustment or maladjustment. Schemata develop during childhood and adolescence and become more complicated over time. Schemata are initially adaptive and accurate representatives of the childhood condition; however, as a child grows up, they become more and more non-adaptive. Schemata, as a part of human drives, fight for their survival and play a major role in the ways people think, feel and interact with others (Young, 1990). Khoda Bakhsh and colleagues (2014) showed that compared to normal adolescents, those adolescents living in orphanages obtained higher scores in the overall test of primary non-adaptive schemata and its subscales of emotional deprivation, being let down/ instability, mistrust/ abuse, social isolation/ alienation, deficiency/ shame, failure, dependency/ incompetence, self-vulnerability and compliance. Wright and colleagues (2009) showed that the formation of schemata affects people's later psychopathology. Cartwright-Hutton (2005) also specified a significant positive relationship between the primary non-adaptive schemata and behavioral/emotional disorders in adolescence. Kazemi and Motahhari (2013) found that the activations of the failure scheme in female students (leading to the belief that they are victims of failure all the time) and the emotional inhibition scheme in male students (leading to excessive inhibition in expressing their emotions for not being rejected or ashamed) will lead to defective metacognitive processing in their future.

In a study on orphanage and non-orphanage adolescents, Khoda Bakhsh and colleagues (2014) showed significant differences between orphanage and non-orphanage adolescents in the overall test of primary non-adaptive schemata and its subscales of emotional deprivation, being let down/ instability, mistrust/ abuse, social isolation/ alienation, deficiency/ shame, failure, dependency/ incompetence, self-vulnerability and compliance ( $p < 0.01$ ). However, no significant difference was observed between the two groups in irrational beliefs and communication skills except for the subscale of assertiveness. In a study entitled "The involvement of cognitive schemas in the manifestation of anxiety according to sex", Camelia Dindelegan (2014) indicated that women are more sensitive to anxiety than men. Anxiety is characterized by mental feelings of tension, nervousness, distrust and anger created by the arousal of central nervous system and affected by different cognitive schemata. In a study entitled "Emotional abuse as a predictor of early maladaptive schemas in adolescents: contributions to the development of depressive and social anxiety symptoms", Calvete (2014) showed that adolescents who were emotionally abused by their parents had higher levels of neuroticism, extraversion, depression and social anxiety compared to their normal peers indicating the predictive power of emotional abuse in the prediction of non-adaptive schemata in adolescents. In a study entitled "Non-adaptive schemata in teenage girls with anorexia nervosa", Stephania and colleagues (2015) showed that teenage girls with high pathology gained higher scores in the test of primary non-adaptive schemata. They were also experiencing more social isolation and emotional inhibitions. The results also suggested the effectiveness of schema therapy in the treatment of anorexia nervosa in teenage girls. In a study entitled "Emotional intelligence and willingness to use dysfunctional cognitive schemata", Odit and Mihala (2015), showed that emotional intelligence is significantly related to some dimensions of dysfunctional cognitive schemata. They also found a significant negative relationship between emotional intelligence and dysfunctional thinking.

The present study aimed to determine the role of cognitive schemata in the prediction of adjustment level of female students with ODD.

### **Method**

This descriptive-correlational study was conducted on a population of 3947 female high school students in the 2013-2014 school year. Sampling in this study was done in two stages:

- 1) Six high schools were selected from district 1 of Ardabil and 600 students were investigated through the ODD Checklist.
- 2) Out of the whole 266 identified students with ODD symptoms (cutoff score=40), 180 students were randomly selected for the analysis.

**The Oppositional Defiant Disorder Checklist (ODD Checklist):** The ODD Checklist has been developed based on the DSM-IV-TR classification and related symptoms. This 12-item checklist is answered and scored based on a 5-point Likert scale, including the options of very little, little, moderate, very and very much. Cronbach’s alpha and parallel-form reliability of this checklist have been reported as 0.79 and 0.75 respectively (Miladi, 2010).

**The Adjustment Inventory for School Students (AISS):** The 60-item AISS has been developed by Sinha and Singh (1993) to assess students’ adjustment in three domains of emotional, social and educational. The Persian version of AISS has been prepared by Karami (1998). Each of the three subscales of emotional adjustment, social adjustment and educational adjustment is measured through 20 items. Each item is answered and scored based on a 2-point scale of 0 (adjustment) and 1 (maladjustment). The correlation coefficient between the AISS scores and managers ratings has been reported 0.51 (Mohammadi, 2008). In Iran, both content and face validity of this inventory have been confirmed by three professors in the fields of counseling, psychometrics and statistics. The parallel-form reliability of the AISS for the total scale has been reported 0.95; for the emotional adjustment, 0.94; for the social adjustment, 0.93; and for the educational adjustment, 0.93 (Karami, 1998).

**The Young Schema Questionnaire- Short Form (YSQ-SF):**The YSQ-SF has been developed by Young in 1998 (quoted by Sadoughi, et al., 2008). This 75-item questionnaire measures 15 primary non-adaptive schemata (Schmidt, et al., 1995; quoted by Sadoughi, et al., 2008). Each item is answered and scored based on a 6-point Likert scale ranging from ‘completely untrue of me’ (1) to ‘describes me perfectly’ (6). A high score in a certain subscale indicates the probability of the presence of a non-adaptive schema. In a study on a non-clinical population, Schmidt and colleagues (1995) have reported a Cronbach’s alpha in the range of 0.83-0.96 and a test-retest reliability coefficient in the range of 0.50-0.82 for each primary non-adaptive schema. Cronbach’s alpha coefficients for the total questionnaire and for each subscale have been reported 0.96 and  $\alpha > 0.80$  respectively. The correlation coefficient between the YSQ-Short Form and the YSQ-Long Form has also been reported ( $r=0.70$ ) (Waller, Mayer & Hynan, 2001). Sadoughi and colleagues (2008) have reported internal consistencies ranging from 0.62 to 0.90 for 17 factors and a Cronbach’s alpha of 0.94 for the total YSQ-SF. In line with similar studies on the English and French versions of the YSR-SF, Sadoughi and colleagues (2008) have verified the structural stability of the Persian version of YSQ-SF indicating its structural stability for being used in different cultures and non-clinical conditions. Fatehi Zadeh and Abbasian (2003) have examined concurrent validity of the YSQ-SF through the study of the relationship between YSQ-SF and the Irrational Belief Test (IBT) results ( $r=0.36, p<0.05$ ).

**Procedure**

In the present study, data were collected through three questionnaires. Thus, after obtaining the necessary permits and selection of schools, 600 students answered the ODD Checklist and 266 students with ODD symptoms were identified. Then, out of the 266 student with ODD symptoms, 180 students were randomly selected and answered the YSQ-SF and the AISS. Finally, the collected data were analyzed through the SPSS software.

**Results**

In this study, %59 of the participants were students in the second year of study at high school (the highest frequency) and %9.5 were students in the first year of study at high school (the lowest frequency); %39 were second child of their families (the highest frequency) and %7.4 were the fourth (or above) child of their families (the lowest frequency).

Table 1. Means and SDs of the primary non-adaptive schemata

		mean	Standard Deviation
Primary non-adaptive schemata	Cuts and exclusion	79.14	22.01
	Autonomy and impaired performance	42.13	15.84
	Impaired restrictions	35.39	9.06
	Others-directedness	33.84	8.74
	Overvigilance and Excessive inhibition	48.42	11.95
	total	238.42	51.06
Adjustment	Emotional adjustment	7.78	3.68
	Social adjustment	7.62	3.41
	Educational adjustment	8.23	3.36
	total	23.63	7.92

As indicated in table (1), the means (and SDs) of the participants’ primary non-adaptive schemata and their adjustment were 238.42 (51.06) and 23.63 (7.92) respectively.

Table 2. Correlation coefficients between cognitive schemata and students' adjustment

variable	Emotional adjustment	Social adjustment	Educational adjustment	adjustment
Cuts and exclusion	-0.289**	-0.244**	-0.045	-0.259**
Autonomy and impaired performance	-0.338**	-0.343**	-0.225**	-0.401**
Impaired restrictions	-0.050	-0.077	-0.035	-0.071
Others-directedness	-0.089	-0.210**	-0.067	-0.077
Overvigilance and Excessive inhibition	-0.123	-0.105	-0.020	-0.111
Primary non-adaptive schemata	-0.265**	-0.180*	-0.071	-0.232**

\*P<0.05 \*\*p<0.01

The results presented in table (2) shows negative significant relationships between the participants' adjustment level and cognitive schemata of cuts and exclusion (r=-0.259) and Autonomy and impaired performance (r=-0.401). Moreover, a significant negative relationship can be observed between primary non-adaptive schemata and adjustment (r=-0.232, p<0.01).

Table 3. Results of multiple regression analysis for the determination of predictive power of primary non-adaptive schemata in prediction of the participants' adjustment level

Predictive variables	R	RS	Non-standardized coefficients		Standardized coefficients	t	P
			SE	B			
Constant	-	-	2.71	19.42	-	7.170	0.000
Cuts and exclusion	0.243	0.059	0.026	0.087	0.243	3.306	0.001
Autonomy and impaired performance	0.411	0.169	0.042	0.202	0.407	4.776	0.000
Impaired restrictions	0.440	0.193	0.064	-0.147	-0.170	-2.290	0.023
Others-directedness	0.450	0.202	0.073	-0.102	-0.114	-1.395	0.165
Overvigilance and Excessive inhibition	0.454	0.206	0.069	0.058	0.089	0.846	0.398

To determine the predictive power of each primary non-adaptive schemata in the prediction of the participants' adjustment level, multiple regression analysis was conducted. As it is shown in table (3), F value is significant; therefore, %20.6 of variances in the participants' adjustment level could be predicted by the primary non-adaptive schemata. Considering the beta values, cuts and exclusion (β=0.243), autonomy and impaired performance (β=0.407) and impaired restrictions (β=-0.170) could predict the variances in the students' adjustment level.

**Discussion**

This study aimed to determine the role of cognitive schemata in the prediction of adjustment in female students with ODD.

The results indicated negative significant relationships between the participants' adjustment level and the primary non-adaptive schemata and its components of cuts and exclusion and autonomy and impaired performance (p<0.01); but, no significant relationship was observed between the adjustment level and the other two components of others-directedness and Overvigilance and excessive inhibition (p<0.01). These findings are in line with other studies done by Cartwright-Hutton (2005), Morris (2010), Klassen and lynch (2007), Auerbach and colleagues (2008), Kamlei and colleagues (2011), Yousefi and Amir Pour (2012), Carter and colleagues (2013) and Zhang and colleagues (2014). Morris (2010) indicated that the primary non-adaptive schemata are directly related to some problems such as CD, extreme anger, anxiety, sadness and feeling of guilt. Cartwright-Hutton (2005) specified a significant positive relationship between the primary non-adaptive schemata and behavioral/emotional disorders in adolescence. Klassen and lynch (2007) and Auerbach and colleagues (2008) showed that children with ODD have a higher rate of social and emotional adjustment problems compared to normal children. Ebrahimi and colleagues (2012) found that the prevalence of non-adaptive schemata is higher among the adolescents, especially girls, living in orphanages (who are more prone to ODD and CD (Grinch, 2001)); so that, almost %47 of these adolescents have non-adaptive schemata. Similarly, Khoda Bakhsh and colleagues (2014) showed that compared to normal adolescents, those adolescents living in orphanages obtained higher scores in the overall test of primary non-adaptive schemata and its subscales of emotional deprivation, being let down/ instability, mistrust/ abuse, social isolation/ alienation, deficiency/ shame, failure, dependency/ incompetence, self-vulnerability and compliance. These findings can be explained by reference to Young (1990) who stated that non-adaptive behaviors are stimulated in response to the created schemata first and then by the schemata themselves; therefore, when non-adaptive schemata are stimulated, people will experience a high level of negative emotions such as anger, anxiety, sadness or feeling of guilt. Experiencing this kind of intense emotions is often unpleasant and makes people's adjustment more difficult. Furthermore, like physical, emotional and intellectual growth, adjustment capacity develops gradually and finally reaches to its optimal level. In fact, adjustment is the results of life experiences and is the most important indicator of mental health in adolescents. A person is called well-adjusted if he/she can make a healthy relationship between him/herself and the surrounding social environment; otherwise, he/she will be called a mal-adjusted person (Islami Nasab, 1994). Due to the existence of many problems in life and poor interpersonal skills, adolescents with few cognitive schemata usually do not have good mental health and consequently are not well-adjusted people (Ladotrop-Gordon, 2003; Weiner, 2004).

The results indicated that the variables could predict %5 of educational adjustment, %3.9 of social adjustment, %7.4 of emotional adjustment and %7.7 of the overall adjustment level of the participants. The primary non-adaptive schemata are highly

unproductive and pervasive themes or patterns about the self and others. Schemata are made of memories, emotions, cognitions and physical feelings that play a very influential role in people's well-adjustment or maladjustment. The presence of non-adaptive schemata leads to many adjustment problems (emotional, social, etc.).

Using questionnaires as the only data collection instrument is one of the limitations of the present study. Given that the samples in the present study were a group of high school students, the results cannot be fully generalized to clinical situations. Considering the relationships between cognitive schemata, emotional processing and the adjustment level of students with ODD, it is recommended to use these variables for the identification and prevention of ODD.

## REFERENCES

1. Calvete, E. (2014). *Emotional abuse as a predictor of early maladaptive schemas in adolescents: Contributions to the development of depressive and social anxiety symptoms*, Child Abuse & Neglect, 38, 4, 735–746.
2. Camelia, D. (2014). *The Involvement of Cognitive Schemas in the Manifestation of Anxiety According to Sex*, Social and Behavioral Sciences, 127, 326–330.
3. Dick, M., Viken, J. & Kaprio, J. (2005). *Understanding the Co variation*.
4. Islami Nasab, A. (1998). Adjustment psychology. Tarh-e-no Publication. Tehran.
5. Kazemi, H., Motahhari, S. (2013). The relationship between primary non-adaptive schemata and cognitive status in students. Journal of Cognitive and Behavioral sciences. Third year. Vol 1. (4).
6. Khoda Bakhshi Kolaei, A., Baseri Salehi, N., Roshan Chesli, R., Falsafi Nejad, M. R. (2014). Comparison of non-adaptive schemata, irrational beliefs and communication skills between orphanage and non-orphanage adolescents. Psychiatric Nursing, 1, 1-12.
7. Odette, D. & Mihaela, N.(2015). *Emotional Intelligence and the Tendency to Use Dysfunctional Cognitive Schemas*, Social and Behavioral Sciences, 187, 301–306.
8. Pour Afkari, N. (1994). English to Persian dictionary of psychology and psychiatry. Vol 1. Farhang-e-maaser Publication. Tehran.
9. Sadock, B. G. & sadok, V. A. (2003). *S ynopsis of psychiatry philade lphia*: Lippincott williares wikins.
10. Sadouk, B., Sadouk, V. (2010). Pocket handbook of clinical psychiatry. Translated by Arjmand, M., Rezaei, F., Faghani Jadidi, N. (2011). Arjmand Publication. Tehran.
11. Sadouk, B., Sadouk, V. (2013). The fifth diagnostic and statistical manual of mental disorders. Translated by Seyyed Mohammadi, Y. (2014). Ravan Publication. Tehran.
12. Stephanie, R., Damianoa, J., Reece, S.R. Linsey, A. & George, P.(2015). *Maladaptive schemas in adolescent females with anorexia nervosa and implications for treatment*, Eating Behaviors, 16, 64–71.
13. Wright, J., Gones, K., & Hatton, S. (2009). *Parent skill training: An effective intervention internalizing symptoms in younger children*. Journal of childhood adolescent psychiatric nursing, 19 (5), 108- 114.
14. Young, G.E. (1990). *Cognitive therapy for personality disorder*. Sarasota, FL: Professional Resources Press.
15. Young, G.E. (1999). *Cognitive therapy for personality disorder A schema focused approach*. Sarasota , FL: professional Resource press.
16. Young,G.E., Klosko, G.S. & Wesishaar, M.E. (2003). *Schema therapy A practitioners Guide*. New york: Guilford press.
17. Young, J. (2003). Cognitive therapy for personality disorders: a schema-based approach. Translated by Sahebi, A., Hamid Pour, H. (2005). Agah Publication. Tehran.