

Early maladaptive schemas as predictor of adolescents runaway

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Summary

Objective. The objective of the present study is to investigate the role of early maladaptive schemas as predictor of the adolescent's girls' runaway.

Method. The participants were 30 adolescent runaway girls from the health centers of the city of Rasht who were selected through a purposive sampling, and 40 normal girls who were selected through a cluster sampling from the normal population of the city. The instrument used was Young's schema questionnaire.

Results. The results of the discriminate analysis showed that after the stepwise analysis, 4 variables were remained which from the 1st to the 4th steps are subsequently: emotional deprivation, vulnerability to danger, defectiveness/shame and dependence/incompetence. The results of the function group categorization analysis showed that all adolescents of the normal group were predicted correctly (100%), however, the discriminate function had placed 96.7% of the runaway group in the right place and 3.3% were wrongly categorized. In general, the discriminate function categorized 98.6% of all cases correctly and this claims a high predictive power and a significant validity for this model.

Discussion and Conclusion. The results were compiled based on theoretical foundations and the role of the schemas in adolescent girls' running away was discussed.

runaway girls / early maladaptive schemas / discriminate analysis

INTRODUCTION

Epidemiological studies have revealed that a considerable number of adolescents show some obvious symptoms of psychopathology during their development phase [1]. The most impor-

tant psychopathologies can be divided into two main categories: emotional problems like anxiety and depression, and behavioral disorders as attention deficit, disruptive behaviors and anti-social behaviors [2]. Substantially, the cognitive models of the etiology of adolescents' psychological problems are based on the value of this group's developmental pathology and it is assumed that the emotional and behavioral problems in children and adolescents is due to factors' risk and multiply vulnerabilities [3]. From among behavioral disorders which may occur due to the adolescents' traumatic past is running away from home [4].

The definition of running away from home is quite complicated; in formal definitions this concept is usually interfered with other vulnerable groups like homeless youth. Adolescents leave

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home because of many reasons; researches show that family problems like abuse during childhood and family conflicts are among reasons of runaways [5]. The family history of runaway adolescents shows that they have mainly grown up in deprived and dysfunctional families and have experienced some failures in school. The main reason for running away from home is usually due to a strong tendency for being with friends and enjoying more independence and also family conflicts, poor communication, and even family violence [6]. Moreover, evidences show that some past experiences such as adolescents' alienation, loneliness, emotional separation, and failure in relations both at home and out of home are effective in this view [7].

The available studies on adolescents' running away are so limited and are usually based on small samples, adults' reports and Organizations data [8]. On the other hand, Research on maladaptive schemas in younger populations has lagged far behind that of adult samples. Nonetheless, as maladaptive schemas are presumed to originate early in life and subsequently create vulnerability for psychological problems, cognitive diatheses must be demonstrable from childhood onwards, albeit in some developing form [9].

In the field of cognitive therapy, Beck (1967) has referred to the concept of schema in his early writings. Dysfunctional schemas are presumed to develop early in life through negative interactions with primary caregivers, and make people vulnerable to psychological problems when confronted with stress [10]

The concept of schema has been Expanded recently by Young(1994) [9] although there are some differences between both schema-conceptualizations. For example, as noted by Schmidt, Joiner, Young and Telch (1995), whereas Beck's underlying assumptions are conditional, schema's as defined by Young are unconditional, suggesting that they are activated more frequently. However, both defined schema's as stable, over generalized belief structures that influence the selection and interpretation of information, have varying levels of activation, and contain stored affects and cognition [11].

Early maladaptive schemas are patterns including: memories, emotions, cognitions and physical emotions in relations to self and others

formed in childhood or Adolescents and accede to adulthood and are very dysfunctional (Young, 2003 quoted in 12). Young (1990 & 1999) believe that although all developmental schemas are not traumatic, they are all intruders to a healthy life [13, 14].

The cognitive theory indicates that the bases of cognitive pathogen in emotional and behavioral disorders are totally different [15]. However, there are some evidences which indicate that different aspects of the schema are engaged in both emotional and behavioral problems of the Adolescents [9].

Investigating the schema in the population of adolescents requires a more precise investigation, and the reason is that researches have hardly considered if a specific schema is specifically involved in internal and external problems of Adolescents? [16]. Research evidences have shown that schemas are related with different psychological problems in the Adolescents' population [9]. For example, Sigre-Leiros, Carvalho, Nobre, 2012 have investigated the relation between schemas and sexual violent behaviors and have shown that those who had experienced sexual violent behaviors had significant higher scores in schemas of disconnection and rejection (distrust/misbehavior), Impaired autonomy and performance (incompetence/inadequacy), and the aspect of Overrigilance & Inhibition negativity/pessimism) [17].

Roelofs, Onckels, Muri, 2013 have also shown that schemas of disconnection/rejection have a basic role as a mediator variable between insecure attachment, peer problems and emotional problems [9]. Roelofs et al., 2011 has claimed that aspects of disconnection/rejection (specifically schemas of mistrust/abuse and social isolation) and the other aspect of Other-directedness, specially the schema of self-sacrifice, act as a mediator in relations of parental attachment and peers with the symptoms of adolescent depression [18].

Another study about Adolescents indicated that the relation between childhood adversity and anhedonia and anxiety had respectively significant relations with schemas of danger preferentially and loss/worthlessness [19].

In another study a comparison was made in parents' early maladaptive schemas between depressed Adolescents with anti-social behav-

iors, non-depressed Adolescents with anti-social behaviors and normal Adolescents. The results indicated that in the mother form, the depressed Adolescents obtained higher scores in the schema of defectiveness/shame in comparison with the other two groups. However, in the father form this difference was significant in the schemas of abandonment/instability, defectiveness/shame, and dependence/incompetence [17]. Muris (2006) also showed a significant correlation between the maladaptive schemas in one hand, and Parenting Styles and personality and psychological characteristics on the other hand in adolescents [20].

Considering the vulnerability of Adolescents and the possible role of schemas in the creation of such traumas [3], in the present study it is assumed that runaway Adolescent girls have a more disturbed family structure, and subsequently more traumatic schemas in comparison with normal girls.

METHOD

The present study is a correlation study which is carried out with the aim of predicting group membership and acquiring discriminate scores of the most important aspects of schemas in two groups of runaway and normal girls. The statistical population of this study included adolescent girls from the city of Rasht (Iran) in 2012. The research sample included 70 adolescent girls. The participants were 30 runaway girls from the health centers of the city of Rasht who were selected through a purposive sampling, and 40 normal girls who were selected through cluster sampling from among the normal population of the city. After obtaining the needed licenses from the authorities for the participation of the runaway girls' samples and persuading the participants for taking part in this research, two groups filled out the Young's schema questionnaires-90. Participants were assured that their data remains completely confidential. The two groups were also homogenized regarding the factor of age. The research data were analyzed using descriptive statistical indexes, and stepwise discriminate analysis using SPSS-16 software.

Instrument

Young Schema Questionnaire (YEMSQ, 2005):The instrument used in this study was the third edition of Young's schema questionnaire which analyses the early maladaptive schema in 18 aspects. This 90-item questionnaire assesses the extent of YEMSQ. Each item scored from 1 to 6. Therefore, the questionnaire score was a total sum of all these scores. The internal consistency coefficient of the YEMSQ was calculated via Cronbach's alpha and the halvesplit method which were 0.91 and 0.86 for the whole sample, respectively for females (0.87 and 0.84) and males (0.84 and 0.81). The therapists and researchers have used this questionnaire to analyze the maladaptive schemas previously (21, 22). In a study carried out in Iran the value of Cronbach's alpha and split half for the general factor of this questionnaire were subsequently 0.86 and 0.91 [23].

RESULTS

The participants in this study were 30 runaway adolescent girls with an age mean of 18.83 ± 3.17 and 40 normal adolescent girls with an age mean of 19.56 ± 1.52 . Considering the legal guardian, in the group of runaway girls there were two girls who did not have a guardian, 9 girls who had their mothers as guardian and 19 girls who had both father and mother as the family guardians. Parents of 8 girls in the group of runaway girls had divorced. This is while in the normal sample all girls had a complete family and there were no divorces among their parents. Questions about drug-abuse history and sexual relations were eliminated due to conservatism and the possibility of the participants not completing the questionnaires fully.

Results of the stepwise discriminate analysis indicate Eigen values and Canonical correlation for the only discriminate function were subsequently 5.085 and 0.914. In other words, the four variables which remained in the final analysis explained 0.835% of the group membership variation of the runaway and normal adolescents.

The results of the discriminate analysis indicate that after the stepwise analysis 4 variables were remained which from the 1st to the 4th steps are subsequently: emotional deprivation, vulner-

ability to danger, defectiveness/shame and dependence/incompetence.

Also lambda and Chi-square values were subsequently equal to 0.164 and 117.39, and this indicated that the discriminate function was significant and was able to distinguish group membership. Function at group centroid were 2.534 for the runaway adolescents and -1.949 for the normal group.

The results of the classification function coefficients showed that all adolescents of the normal group were predicted correctly (100%), however, the discriminate function had placed 96.7% of the runaway adolescents in the right group and 3.3% were wrongly categorized. In general, the discriminate function categorized 98.6% of all cases correctly and this claims a high predictive power and significant validity for the model.

The results depicted in Tab. 1 shows a significant difference in the two groups' means in respect to the schema's aspects. The analysis of the F ratios' significance show that the two groups have a significant difference in all variables except social isolation, self-sacrifice, approval seeking, enmeshment/undeveloped self, entitlement abandonment/instability, and unrelenting standards/hyper criticalness and negativity/pessimism. In other words, the runaway group had obtained higher scores in the rest of the schemas in comparison with the normal group.

Tab. 2 – next page shows the results of stepwise discriminate analysis for the 18 early maladaptive schemas. After final analysis, 4 variables were remained which from the first to fourth steps are namely: emotional deprivation, vulnerability to danger, defectiveness/shame, and dependence/incompetence. F values for all four variables are significant. Considering the Standardized coefficients emotional deprivation in comparison with other variable, was the best predictor of the group membership (0.956).

Considering the un Standardized coefficients column and the constant number in a stepwise method the below predicting equation is obtained:

$$D=Y' = -4.282 + 0/235(x_1) + 0/177(x_2) - 0/120(x_3) + 0/070(x_4)$$

Below the separate graphs 1 and 2 – page... of the discriminate analysis are presented so that a visual comparison can be made:

The discriminate analysis diagrams show the number of standard score cases in each group. A comparison of the available zero points on the X axis shows that the distributions of the two groups are distinctly distinguishable.

Table 1. Normal and runaway girls' mean difference in respect to the schema's aspects

Variables	group	Mean±SD	Wilks' Lambda	F	Sig
Failure to Achieve	Runaway	140.83±50.49	00.717	260.44	0.000
	normal	90.66±20.67			
Dependence I	Runaway	140.80±90.09	00.793	170.48	0.000
	normal	80.58±10.69			
Vulnerability	Runaway	150.20±60.04	00.691	290.89	0.000
	normal	90.58±10.88			
Enmeshment	Runaway	120.93±40.07	1	00.02	0.878
	normal	130.05±20.19			
Insufficient Self	Runaway	180.56±50.21	00.879	90.19	0.003
	normal	150.71±40.06			
Entitlement	Runaway	17±40.04	1	00.003	0.960
	normal	160.89±100.47			

table continued on next page

Emotional D	Runaway	200.80±50.80	00.267	1830.536	0.000
	normal	70.38±10.88			
Abandonment	Runaway	190.50±40.44	00.997	00.213	0.646
	normal	180.87±60.34			
Mistrust Abuse	Runaway	180.23±40.30	00.756	210.59	0.000
	normal	130.8±30.44			
Social Isolation	Runaway	170.30±40.35	00.963	20.56	0.114
	normal	140.23±90.75			
Defectiveness S	Runaway	140.93±40.17	00.991	00.633	0.429
	normal	140.17±30.67			
Subjugation	Runaway	170.30±40.81	00.749	220.39	0.000
	normal	120.38±30.81			
Self-Sacrifice	Runaway	150.80±50.37	00.986	00.942	0.335
	normal	130.92±90.47			
Approval se	Runaway	180.96±30.89	00.956	30.06	0.084
	normal	200.56±30.64			
Emotional I	Runaway	150.33±40.40	00.785	180.33	0.000
	normal	100.97±40.02			
Unrelenting-un	Runaway	160.73±40.44	00.999	00.044	0.834
	normal	170.12±90.47			
Punitive ness	Runaway	170.63±40.16	00.910	60.60	0.012
	normal	150.41±30.02			
Negativity P	Runaway	170.40±40.80	00.983	10.12	0.292
	normal	150.33±90.77			

Table 2. Results of stepwise discriminate analysis for the 18 early maladaptive schemas

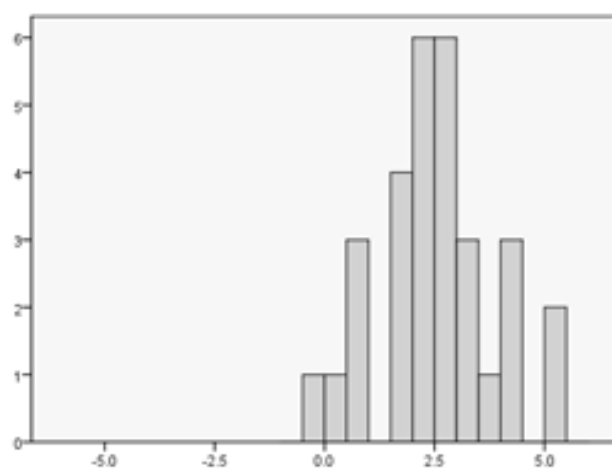
predictors		lambda	Exact F				Stepwise method			Classification	
step	variables		DF1	DF2	Statistic	Sig	Standardized	un Standardized	Structure Matrix	Runaway	normal
1	Emotional Deprivation	0/267	1	67	183/53	0/001	0/956	0/235	0/734	0/593	0/281
2	Vulnerability	0/691	2	67	122/19	0/001	0/750	0/177	0/296	1/290	0/495
3	Defectiveness Shame	0/991	4	67	92/25	0/001	-0/467	-0/120	0/043	1/460	0/408
4	Dependence incompetence	0793	3	67	81/38	0/001	0/425	0/070	0/226	0/073	0/610
-	Constant	-	-	-	-	-	-	-4/282	-	-30/612	-10/105

DISCUSSION

The objective of this study was to anticipate adolescents’ runaway through the Young’s early maladaptive schemas model. Young had pre-

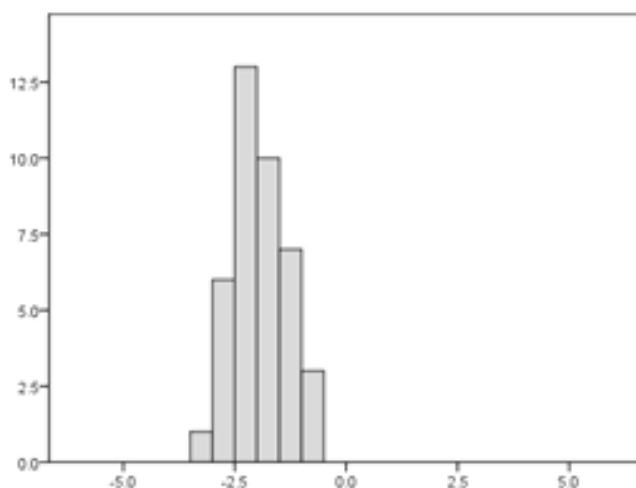
sented this model with the aim of explaining parents’ relations pathology and the theoretical basis of his model stands on some concepts and researches of the theory of attachment. This model suggests that a potential mediator in the parents’

**Canonical Discriminant Function 1
group – Runaway**



Mean = 2.53
Std. Dev. = 1.354
N = 30

**Canonical Discriminant Function 1
group – Normal**



Mean = -1.94
Std. Dev. = 0.599
N = 40

relations and occurrence of children's pathology is the creation of dysfunctional early schemas or negative core beliefs in children [24].

The obtained results indicated that schemas of emotional deprivation and defection/shame from the area of disconnection/rejection; and schemas of dependence/incompetence and vulnerability to danger, from the aspect of Impaired autonomy and performance were the most important predictors in the discrimination between the two groups (normal and runaway).

The results of this research are in line with many other similar researches which have indicated the importance of the two areas of disconnection/rejection, and Impaired autonomy and performance in the creation and continuance of some psychological disorders and behavioral abnormalities. For example, the area of disconnec-

tion/ rejection play an important role in the etiology of depressed adolescents' problems [18], adolescents with emotional problems and insecure attachments [9], adolescents with the history of sexual violence [17], depressed adolescents with antisocial behaviors [25], adolescents sex offenders [26], etc.

Considering the structural problems of the runaway girls' first families and existence of unfit introductory factors in their lives, it seems that one of the underlying factors that leads to the creation of social maladaptation and diverse psychological disorders in this group is in fact the existence of early maladaptive schemas formed inside them as a result of childhood unhealthy interaction and improper parenting styles.

The area of disconnection/rejection is one of the most important areas of the schema which is

involved in the creation and continuation of psychological problems and behavioral disorders in a way that Young (2003) stated that people having the schema are the most vulnerable group. This aspect of the schema is generally related to the security flaws of individuals in the environment. Patients who are placed in this area are not capable of creating satisfying and secure attachments with others and their needs to security, consistency, empathy, engagement in sentiments and being accepted are not met properly. In general, these needs cannot be satisfied in separated, cold, rejecting, secluded, explosive, misbehaving and abandoned families [27].

More specifically, people having the schema of emotional deprivation believe that their natural emotional needs will not be satisfied sufficiently by important people in their lives. These deprivations are mainly deprivation from empathy, care and protection. People having the schema of Defectiveness/shame also believe that they are despised, inferior, poor and unworthy and people do not like them. This is why they feel and experience aggressiveness, unworthiness, and vexatious inside themselves [27].

Considering the fact that about one third of the runaway adolescents in this study belonged to and had grown up in one guardian or guardian less families and have been exposed to parents' troubled relationships; it is assumed that this issue had paved the way for the growth of schemas like disconnection/rejection. In fact, it is logical that in such families the child's need to affection, attachment and security is not fully observed. As a proof to these findings, researches have shown that adolescents who live with one of the parents or those who are adopted are exposed to a higher risk of non-adaptive behaviors. Also these negative outcomes are due to some other reasons as the nature of individual's relation with people out of his/her main family members, the way his/her behaviors are supervised or controlled by parents and some other factors like the quality of their relations with peers and interpersonal cognitive perception skills [28]. This issue is even more important in eastern societies where adolescents are connected and depended on their core families to higher ages.

The obtained results are also in line with many researches which claim these people have main-

ly grown up in turbulent families having weak parent relations (Bugairets et al., 2005) i [29]. As Bugairets explains, it is more probable that people with such family histories have a wider range of dysfunctional growing experiences. Experiences such as rejection and physical, verbal or sexual treatment abuse threaten individual's security [29]. As Young (2003) also believes, the growth of schemas roots mainly on the constant aversive patterns of child's interaction with family members and peers, rather than single traumatic events [27].

The other area of schemas which has a great importance in the anticipation of adolescents' runaway was the aspect of impaired autonomy and performance. In general, autonomy and independence is the ability to separate from the family and act independently in accordance with the age.

People having schemas of this area face some problems in the trend of this independence and separating from the symbols of family and parents [27]. Although, runaway adolescents appear to have been separated from their families, but this independence has a pathologic nature and is by no means considered as a favorable social act. Fundamentally, the results of this research indicated that the schemas of dependence and incompetence and vulnerability to danger or disease could well distinguish between runaway adolescents from the normal ones. People with the schema of dependence and incompetence feel powerless in shouldering the routine responsibilities without the help of others. In Young's (2003) view, this schema often appears as the sense of insolvency and being passive. The concept of the schema of vulnerability to danger or disease is also comprised of an exaggerated fear and catastrophic any problem and inability to cope with the injury or disease which show itself as medical, emotional or external catastrophic [27].

In this view, Leen, et al., (2010) showed that the schemas of defectiveness/shame are significant predictors of the symptoms of oppositional defiant disorder, while the schemas of dependence/incompetence and also defectiveness/shame are positive and significant predictors of the symptoms of adolescents' depressions [25]. Welburn, Corstine, Dagg, et al., (2002) have also reported that the early maladaptive schemas are re-

lated with the psychological symptoms including somatization, obsessive, anxiety, depression and paranoid beliefs, also the schema of abandonment, vulnerability to danger and disease, sacrifice and emotional inhibition are important predictors of anxiety and depression in individuals [30]. On the other hand, Ashley and Curtin (2002) also claim that the maladaptive schemas of Defectiveness/shame, vulnerability, and dependence/incompetence are co-related with the parental perceptions and symptoms of depression [31].

There is a rational justification for accepting the fact that adolescents who have not experienced natural accountability in a proper manner will be passive towards the life's responsibilities and obstacles. However, Young (2003) states that "people with this schema have often been under an excessive and extremist support" [27], but it seems that these supports usually have an excessive interfering and controlling nature on these adolescents in a way that Cooper, Rose, and Turner (2005) state that schemas have a significant correlation with the weak maternal cares in one hand and excessive maternal cares in over weight girls in the other hands [32]. It can be guessed that this excessive control and interference changes the child's attitude towards the life's difficulties and obstacles and intensifies this constant anxiety as a fear of vulnerability against injury or disease in early adulthood and paves the way for being affected by different kinds of depression and anxiety problems.

In general and considering the obtained results, it can be claimed that schemas have a great role in the adolescent girls' runaway.

These groups of adolescents are not capable of establishing a constant and intimate relationship, have a low self-esteem and are very much depended and perceive the world as a very dangerous place full of threats. These entire damages root in having separated families, weak parental relations, failure to satisfy the individual needs of attachment and communication, and lack of individual consistency and solidarity which all can be found in the early core family. Hence, therapeutic schemas can be compiled in the future researches for runaway adolescents based on an emphasis on the obtained schemas in this research. Also, along with the

parents' education about the way these schemas are formed, parental schemas of this group of adolescents are extracted in a comparison with the normal sample and are used in the compilation of a therapeutic plan. This research also had some limitations which make it difficult to generalize the results. Some of the limitations were using self-report questionnaire, some of the questionnaires not being filled out, eliminating the questions about drug abuse and sexual relations experiences, purposeful sampling, and not having access to a larger sample size.

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