The Schema as the Predictor of Depression among the Adolescents

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Abstract

The paper focuses on the role of individual's schema in generating the depression among the adolescents. A purposive sample of 100 adolescents male and female with age range of 10 to 25 years was taken from non-clinical population. The Beck Depression Inventory II and Young Schema Questionnaire (Short Form) were administered on the subjects to determine the level of depression stimulated by schema. The Readiness Ruler was also administered to determine how much the subject was ready or how much daily life events make him to alter his schemas. In addition to these measures the Demographic Information sheet was also provided to subjects to get the background information from them. Data was analyzed by applying Pearson Product Moment Correlation and Regression analysis. The results clearly supported the hypotheses that the disorganized or false schemas and beliefs lead to depression. Results are discussed in relation to latest schema theories and cognitive therapy which can be used to rationalize the beliefs in maintaining the good mental health of an individual.

Key Words: Schema, Depression, Adolescents, Cognitive Therapy, Mental Health

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INTRODUCTION

The psychosocial factors play a major role in the development of depression, aggression, anxiety and other psychological disorders. This study aims to find out whether the core beliefs, negative thoughts and prejudiced attitudes lead to depressive symptoms and other maladaptive behaviors or not. Also how these depressive thoughts and beliefs effect our decisions, daily living, our relations and so on. According to Beck (1976), depressive information processing stems from the activation of pathological cognitive structures or schemas that develop early in life and become activated in adulthood in response to stressful experiences. These schemas lead to the development of beliefs which in future restrain or catalyze living a healthy sociable life, making constructive decisions and maintaining relationships.

Once activated, such schemas are thought to offer access to a host of negative themes, and guide a pattern of negative self-reference information that precipitates depression (Beck et al., 1979; Segal & Shaw, 1988). Cognitive products may take the form of negative attributions, pessimistic or hopeless expectations for the future, or perceptions of inferiority (Rector et al., 1998). The studies by Segal et al (1988) and Segal & Vella (1990) suggest that depressive information processing is driven by the activation of negative elements within a self-structure, rather than the activation of an enduring depressive self-schema. The schemas lead to the development of beliefs about our various related events, issues, things and people; also that these beliefs not solely depend upon our relative experiences but also strengthened by the cultural perspectives of everyday living. Ellis and Harper in 1961 (Rahman & Ahmed, 2005) outlined a number of dysfunctional cognitive processes and irrational beliefs that lead to

depression which include: Demand for approval, high self expectations, blame proneness, frustration reaction, emotional irresponsibility, anxious over concern, problem avoidance, helplessness for change, and perfectionism.

Adolescence is considered as transitory phase, which Erickson (Rahman & Ahmed, 2005) called identity versus role diffusion; as going through transitions these young minds may avoid problems rather than solving them. In addition, frustration reaction was found to be a predictor of depressive symptoms both in males and females (Rahman & Ahmed, 2005). Gotlib proposed that interpersonal cognitive schemas, i.e., how the individual perceives him/herself in relation to interpersonal relationships, should be emphasized in research on interpersonal pathways to depression. In line with these integrative interpersonal models of depression, Schmidt and Young (1999) noted that schema-based formulations of interpersonal relationships can be useful in understanding the role of interpersonal factors in the course of depression. Beck theorized that early parenting style and early negative life experiences may result in the development of maladaptive, negative core beliefs or schemas about oneself and how the world functions. When early maladaptive schemas are activated by related interpersonal or stressful events later in life, the individual is likely to develop a negative view of self and the event, and cognitively distort relevant information, which may lead him/her to experience depression. Hence, Beck proposed maladaptive schemas and dysfunctional cognitive styles as vulnerability factors to depression that potentially exacerbate the effects of stressors on depression. In general, research with children as well as adults on the role of cognitions in depression provided support for Beck's theory of depression (Schmidt and Young, 1999 Cankaya, 2002). The question of which cognitive schemas as measured by Young's Schema Questionnaire (Young, 1994) were related to depression was examined in several studies. Schmidt et al., (1995) reported that 'dependency' and 'defectiveness' predicted depression in an undergraduate student sample.

'Mistrust/abuse', 'abandonment', and 'social isolation' predicted depression in college students in Harris, Curtin, and Vicente's study (1999). 'Defectiveness/shame', 'self-sacrifice', and 'insufficient self-control' in a clinical sample and 'vulnerability to harm' in a nonclinical sample predicted depression in Shah and Waller's study (2000). Further, Shah and Waller showed that the EMSs; 'vulnerability to harm' in the nonclinical sample, and 'vulnerability to harm', 'dependence/ incompetence', 'emotional inhibition', 'failure to achieve', and 'unrelenting standards' in the clinical sample were the subscales of the Yaung that acted as mediators in the relationship between early parental experiences and depressive symptomatology. Taken together, while inconsistent across studies, the seven cognitive schemas directly related to depression in previous research afforded the highest likelihood of establishing connections to depression (Cankaya, 2002).

Rationale

So far little work has been done on the schema, cognition and irrational beliefs as the predictors of psychological problems in the Pakistani population. Particularly the schema has not been among the most of interest of the Pakistani researchers. However, these are the basic structures that organize our knowledge and assumptions about something and are used for interpreting and processing information. This study mainly aims to find out the basic distortions in our cognitions and thoughts that lead us to maladaptive behaviors. This research based on the adolescents of the society will help and guide the professionals in the society who are working as the social mediators and also the psychologists and psychiatrists to look more clearly into the process and help people to alter their beliefs and live a healthy mental life.

MATERIALS AND METHODS
Sample collection

Adolescents aged 10-25 years were selected by purposive sampling. Among them there were 54 males and 46 females chosen from educational institutes, hospitals, and

organizations. The reason being the language of measuring instruments must be properly comprehended by the subjects i.e. English.

Measurements

Demographic Information Sheet

Demographic information sheet was given to the subjects to get their information regarding age, gender, birth order, education and marital status.

Young Schema Questionnaire (Short Form)

The measure of schemas was the Young Schema Questionnaire that consists of 75 items. Each item is scored on a 6 point scale i.e. from completely or almost completely untrue of me (1) to describe me perfectly or almost perfectly (6). It covers 15 major hypothetical dimensions of schema (Stopa, L., & Waters, A. 2005). The SQ has been found to have adequate test-retest reliability - the stability scores for subscales range from 0.50 to 0.82 (Schmidt et al., 1995).

Beck Depression Inventory-II

Depressive symptoms were measured through Beck Depression Inventory II. BDI-II is a self report inventory that comprised of 21 items and used to measure levels of depression. Each item is scored on a 4 point scale i.e. from minimal depression (1) to severe depression (4). The test retest reliability of BDI-II is reported to be 0.93 (Steer and Brown, 1996).

Readiness Ruler

The Readiness to Change Scale was also used to assess how the individual's core beliefs create hindrance or catalyze the treatment process.

Procedure

A pilot study was conducted on 10 students (5 males and 5 females) at the university, with their consent and the purpose of the study was explained to them. The objective of the pilot study was to find and make clear that the mode of instructions, language of the scales is easily understandable by the subjects; also to check the total time taken by the individuals for the completion of two questionnaires.

The Research design employed was Repeated Measure Design. The participants were given the demographic data sheet for knowing their background information. The participants were presented the Young Schema Questionnaire to know their schemas. Then the time break of 20 minutes was given before presenting them the BDI-II for measuring their level of depression. The participants rated themselves on the 10 point scale of readiness ruler to find out how much they had an insight into their cognitions and how much they feel themselves to bring a change in their thoughts and imaginations

RESULTS AND DISCUSSION

The Table I shows the results of total score, and for men and women separately (Stopa and Waters, 2005). The results are computed by using SPSS.16 (Statistical Software).

Scales	Male		Female	
	M	S.D	M	S.D
ED	11.59	4.19	11.04	4.53
AB	12.87	5.22	12.46	5.72
MA	12.43	4.60	12.13	3.64
SCI	12.57	5.17	12.67	5.23
DEF	11.09	5.24	10.70	5.55
FAIL	12.20	6.17	11.26	5.23
DI	11.87	5.86	10.15	5.21
VUL	12.35	6.38	10.61	4.91
EMN	12.43	5.37	12.04	6.14
SJ	12.14	4.84	11.59	4.43
SS	15.78	6.87	16.86	6.47
EI	14.00	4.74	13.50	4.76
US	17.03	5.37	17.39	5.68
ENT	15.22	5.55	13.96	4.97
ISC	14.63	5.78	13.11	4.73
Total YSQ Score	198.22	58.30	189.48	51.71
Total BDI Score	16.06	8.87	15.63	9.57
Total RR	5.48	2.44	5.83	2.10

ED= Emotional Deprivation, AB=Abandonment, MA=Mistrust and Abuse, SCI=Social Isolation, DI=Defectiveness and Social Undesirability, FAIL=Failure, DI= Dependence/ incompetence VUL= Vulnerability to Harm and Illness, EMN=Enmeshment, SJ=Subjugation, SS= Self Sacrifice, EI=Emotional Inhibition, US=Unrelenting Standard, ENT= Entitlement, ISC=Insufficient Self Control

Table 1

Means and Standard Deviations of the total and subscale scores of YSQ, total of BDI and total of Readiness ruler for male and female Adolescent participants (M=54, F=46) . The level of depression i.e. Total BDI score for male (M=16.06, SD=8.87) and female (M=15.63, SD=9.57) is moderately low and

also the total score on YSQ for male (M=198.22, SD=58.30) and female (M=189.48, SD=51.71) is quite low. The Total RR score for male (M=5.48, SD=2.44) and female (M=5.83, SD=2.10) is also moderately low. To determine the relationship between the schema and depression the Pearson Product Moment Correlation was applied.

Table 2
Pearson Product Moment Correlation Coefficient between total score of BDI -II With the total was used and subscales of YSQ and Readiness to change Ruler for 100 adolescents (N=100)

Scales	Total	Males	Females
ED	.321**	.420**	.220
AB	.319**	.345*	.292*
MA	.314**	.339*	.286
SCI	.287**	.304*	.270
DEF	.265**	.201	.329*
FAIL	.159	.209	.094
DI	.180	.165	.199
VUL	.243*	.310*	.154
EMN	.189	.297*	.084
SJ	.028	.026	.027
SS	.292**	.267	.328*
EI	.210*	.207	.211
US	.294**	.361**	.228
ENT	.255*	.256	.255
ISC	.282**	.342*	.207
Total YSQ Score	.349**	.375**	.320*
Total RR	.036	.024	.055

ED= Emotional Deprivation, AB=Abandonment, MA=Mistrust and Abuse, SCI=Social Isolation, DI=Dependence/incompetence, DEF= Defectiveness, social undesirability, FAIL=failure, VUL= Vulnerability to Harm and Illness, EMN= Enmeshment, SJ=Subjugation, SS= Self Sacrifice, EI=Emotional Inhibition, US=Unrelenting Standard, ENT= Entitlement, ISC=Insufficient Self Control.

Note:*=p< 0.05, **=p< 0.01
The schema and depression are significantly correlated, $r = 0.349$, $p < 0.01$.

Among the hypothetical schemas Emotional Deprivation, Abandonment, Mistrust and Abuse, Social Isolation, Defectiveness, Social Undesirability, Self Sacrifice, Unrelenting Standard, Insufficient Self Control are the most highly correlated with depression. The results also demonstrating the negative correlation between the depression and readiness to change, though not quite significantly. To predict the relation between schema and depression the Regression Analysis was applied.

Table 3
Relationship between total score of BDI-II with the total and sub-scale scores of YSQ and Readiness Ruler using Multiple Regression Analysis for the total sample (N=100).

Scales	B	SEB	β
ED	.89	.27	.42**
AB	.36	.28	.21
MA	.12	.31	.05
SCI	.37	.38	.21
DEF	-.45	.35	-.26
FAIL	-.43	.29	-.27
DI	1.19	.32	.73**
VUL	.13	.26	.08
EMN	-.24	.27	-.15
SJ	-1.39	.31	-.70**
SS	.67	.21	.49**
EI	-.74	.36	-.38
US	.18	.30	.11
ENT	.16	.31	.09
ISC	.24	.35	.14
Total YSQ Score	.06	.016	.352**
Total RR	-.08	.39	-.02

ED= Emotional Deprivation, AB=Abandonment, MA=Mistrust and Abuse, SCI=Social Isolation, DEF= Defectiveness and Social Undesirability, FAIL=Failure, DI=Dependence/incompetence, VUL= Vulnerability to Harm and Illness, EMN= Enmeshment, SJ=Subjugation, SS= Self Sacrifice, EI=Emotional Inhibition, US=Unrelenting Standard, ENT= Entitlement, ISC=Insufficient Self Control

Note: R^2= .103, ΔR^2=.103, B= Unstandardized Coefficient, SE B= Standard Error of Unstandardized Coefficient, β=Standardized Coefficient Beta, **=p< 0.01

The results reveal the overall weak prediction of depression. However the hypothetical schemas including Emotional Deprivation, Dependence/ incompetence, Subjugation and self sacrifice are the strongest predictors of depression of the overall group of individuals.

The overall analysis also indicates that the subjects' depressive thoughts make changes in expected direction as hypothesized.

DISCUSSION

The aim of this paper was to investigate the role of individual's schema in generating the depression among the adolescents. The results indicate that emotional deprivation, dependence/ incompetence, subjugation and self sacrifice are the strongest predictors of depression among the adolescents. The results also demonstrate the negative correlation between the depression and readiness to change, though not quite significantly. However, these results must be interpreted cautiously as the sample was small and the schemas are pre-conceived ideas that vary from time to time and from individual to individual following different as well as adverse circumstances. The study shows that even very modest shifts in mood can influence the way in which participants respond to some questions on the YSQ. Changes in mood may alter a person's view of self in a negative direction (Stopa and Waters, 2005). As adolescents is a transitory phase, which Erickson (Rahman and Ahmed, 2006) called identity versus role diffusion; as going through transitions these young minds may avoid problems rather than solving them. It highly advocates our results of reluctance to change their current schemas as they consider themselves well inclined to their life issues and changes. Young (1999) proposed that schemas can be grouped into domains, which represent the hypothesized developmental origins of the schemas. He described five domains: disconnection and rejection, impaired autonomy and performance, impaired limits, other-directedness, and over-vigilance and inhibition. Each domain represents a grouping of developmental needs. There is no evidence at this stage to indicate whether the developmental stage at which the schema emerged influences when and how that schema is retrieved. However, it is interesting to note that both of the schemas which were raised in the depressed mood condition belong to the earliest domain, that is, disconnection and rejection. On the other hand, entitlement which is raised in the happy condition belongs to the later developmental domain of impaired limits (Stopa and Waters, 2005).

In the whole study we found the low score on the Entitlement; we have found that this schema can be problematic for clinical patients, both when it is high and also when it is low. For example, people with very low entitlement scores may be unable to appropriately assert themselves, may feel that their needs are unimportant, and may tolerate unacceptable behavior from others. It is possible that moderate levels of entitlement are both healthy and have a protective function for the individual. Again, these points must be interpreted with caution, as we do not have data on the 'healthy' range of entitlement scores (Stopa and Waters, 2005). A basic premise of Jeffrey Young's approach is that individuals with more complex problems have one or more early maladaptive schemas, which makes them vulnerable to emotional disorders.

Most of our hypotheses have been approved as per our results indicated. The question of which cognitive schemas as measured by Young's Schema Questionnaire (Young, 1994) were related to depression has been examined in several studies. Schmidt et al. (1995) reported that 'dependency' and 'defectiveness' predicted depression in an undergraduate student sample. 'Mistrust/abuse', 'abandonment', and 'social isolation' predicted depression in college students in Harris, Curtin, and Vicente's study (1999). ('Defectiveness/shame', 'self-sacrifice', and 'insufficient self-control' in a clinical sample and 'vulnerability to harm' in a nonclinical sample predicted depression in Shah and Waller's study, 2000). Taken together, while inconsistent across studies, the seven cognitive schemas directly related to depression in previous research afforded the highest likelihood of establishing connections to depression (Cankaya, 2002). The present design and time duration did not allow us to examine why some schemas should be affected whereas others were not. One of the main weakness was that individuals were currently in varied circumstances and those affected significantly in their responses to the questionnaires. As the Young Schema Questionnaire was adapted, for this study mainly due to the reason as it measures

specifically negative schemas, the population used was non clinical and this is the most important reason probably for non significant results. However, the implication of this research may help the professionals by keeping in view the vulnerability of the individuals that may adapt to some maladaptive or negative schemas which they carry on in their lives without changing them. The reason being their current situation, their interpersonal relations, social desirability, parental attitudes, etc. As particularly in our Pakistani culture the adolescents are at the most sensitive stage where they have to cope many entangled problems of the society and family conflicts as well as cultural varsities; they may form the schemas that drastically lead them to depression and many other cognitive dysfunction. So keeping in view all this we could formulate more constructive strategies and chalk out future plans to lower the rapidly increasing psychological problems in our country.

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