Self Reported Depressive Symptomatology in Adolescents: A Psychometric Study

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This study attempts to explore cultural-specific manifestation and expression of depressive symptomatology in adolescents. 40 school children referred by their teachers to the school counsellors were interviewed to explore the expression of depressive symptomatology. A list of 32 elicited items was given to 10 school counselors for empirical validation. All those items receiving 90% agreement from the experts were retained. A final list of 27 items converted into a self report measure (Depressive Symptomatology Scale, DSS) was piloted on 30 children. In the final phase, a 385 participants selected through stratified sampling were given the DSS, the Self-Concept Scale (Perveen, Saleem, & Mahmood, 2011), and the Child Depression Inventory (1992) for concurrent validity and a demographic performa. Principal Component Factor analysis yielded a four factor solution; Sadness, Indecisiveness, Irritability and Psychosomatic symptoms. The DSS was found to have high internal consistency, test-retest reliability, and concurrent and discriminant validity. Results are discussed in terms of gender differences, school counseling and cultural differences.

*Key words: a*dolescents, gender, depressive symptomatology, culture, reliability and validity

Adolescence period is one of the crucial and critical times of one's life, where an individual going through a transition into an adulthood. In this important phase of life, an individual faces many challenges ranging from continuous physical growth and development, increasing cognitive abilities, demands of an expanding social world and complex psychological interactions (Windle & Mason, 2004). Furthermore, an adolescent also faces pressure of changing self-evaluation, developing a new sense of identity (Erikson, 1950, 1968), liberation and autonomy from parents (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000), career choice, changing group affiliation and learning of new social skills to relate with friends and peers (Buehler, 2006; Rowling, 2006). Most adolescents adjust well with this transition yet for some, this becomes a very difficult and troublesome period. Ever changing demands and continues adjustment requirement may places an adolescent at greater risk of developing emotional and behavioral problems (Dhuria, Sharma, Taneja, Kumar, & Ingle, 2009).

Throughout the world, a large number of adolescents experience emotional and behavioral problems (Al- Gelban, 2007; Erol, Simsek, & Munir, 2010) with serious negative consequences like school dropout, fail in academic performance and serious associated psychopathologies (Mash & Wolfe, 2005; Nock & Kazdin, 2002). One of the common emotional problems experienced by a large proportion of adolescents is depression. Researchers also identified adolescence as a crucial period for studying risk and protective factors for emergence and development of depression (Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2003). Depression has gained a tremendous interest from researchers (e.g. van der Veek, Nobel, & Derkx, 2012).The

prevalence rate of depression in adolescents is between 15%-20% with a predominance of female sufferers with the prevalence rate of 15%-27% (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Frank & Young, 2000; Khalil, Rabie, Abd-El-Aziz, Abdou, El-Rasheed, & Sabry, 2010).

Several studies have been carried out to identify the possible risk and protective factors for depression among children and adolescents (e.g. Essau, 2007; Shaw & Dallos, 2005). The results of these studies showed that the experience of early parent-child relationship may play a role of a risk factor in developing depressive symptoms among adolescents (Shaw & Dallos, 2005). In another study, perceived parental rearing practices and temperament styles were found to be a strong predictor of depressive symptoms among adolescents (Oldehinkel, Veenstra, Ormel, de Winter, & Verhulst, 2006). Temperament styles such as negative affectivity is also associated with depressive symptoms (Kendler, Gatz, Gardner, & Pedersen, 2006; Mezulis & Rudolph, 2012). One of the important assumptions in understanding pathology of depressive symptoms has been introduced by Beck (1976). Persistent negative and pervasive thinking pattern especially related to one's own self and others is associated with depressive symptoms (Beck, 1987). However, positive self-esteem, positive peer relationship and family cohesion were found to be the protective factors against depression in adolescents (Nguyen, Rawana, & Flora, 2011).

Depressive symptoms have been found to affect academic, social and personal adjustment of adolescents. Depression is also associated with poor school performance, poor concentration and difficulties in social relationships (Frojd, Nissinen, Pelkonen, Marttunen, Koivisto, & Kaltiala-Heino, 2008; Needham, 2009), loneliness, social withdrawal and substance abuse (Lasgaard, Goossens, & Elklit, 2011), negative self-concept (Haugen & Lund, 2002), sleep problems (Danielsson, Harvey, Macdonald, Jansson-Fröjmark, & Linton,

2013), a tendency to indulge in risky behaviors (Testa & Steinberg, 2010) and associated psychopathologies (Modrzejewska, 2013). To sum up, the negative consequences associated with depression disrupts the normal functioning of the adolescents. Therefore, it is important to identify early and timely the depressive symptoms.

The upsurge of interest in depression has lead researchers to develop and validate numerous assessment and screening scales for measuring depression (e.g. Birleson, Hudson, Grey-Buchanan, & Wolff, 1987). Broadly speaking, there are three different ways used to measure depression in children and adolescents namely, structured diagnostic interviews, behavior rating scales and self-report measures. The most widely used structured interviews are the Schedule for Affective Disorders and Schizophrenia for School-Age Children - Present and Lifetime version (K-SADS-PL Joan et al., 1997), the Child Assessment Schedule (CAS; Hodges, Kline, Stern, Cytryn, & McKnew, 1982), and the Diagnostic Interview Schedule for Children (DISC; Costello, Edelbrock, Dulcan, Kalas, & Klaric, 1984). Most of the structured clinical interviews are primarily based on the rigid DSM diagnostic categories with the sole purpose of diagnosing and labeling children and adolescents as having a disorder (Merrell, 2003). A second approach to assess depression among adolescents is though rating of teachers, parents or both. The most widely used rating scale is Child Behavior Checklist Parent and Teacher Forms (Achenbach, 1991).

The third approach is the self report measures to assess and screen depression. The most widely used self report measures are Child Depression Inventory (Kovacs, 1992), the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1986), Center for Epidemiologic Studies Depression Scale (CES-D, Radloff, 1977, 1991). Internalizing Symptoms Scale for Children (Merrell & Walters, 1997), and Beck Depression Inventory-II (BDI-II, Beck, Steer, & Brown, 1996).The BDI and CES-D were initially developed for adults and have been used without adaptation to adolescents; the other scales were all designed specifically for use with children or adolescents. Most of the self-report measures are based on the DSM diagnostic criteria for measuring of depression in adults. Despite the limitations mentioned above, among the three approaches used to assess depression among adolescents, self-report measure is more appropriate as depression is one of the emotional or internalizing problems that may not be easily observed and rated by others (Merrell, 2003). Self-report measures are also provide a more direct and objective information regarding emotional and internalizing problems like depression of children and adolescents.

The impact of culture on human behavior is a major concern of mental health professional (Matsumoto, 2000), as culture plays a crucial and influential role on shaping and expressing human behavior (Fung & Lau, 2009; Sung, 2010). A wealth of research has now been devoted to determine the role of culture on the definition, classification, experience and expression of psychological issues (Tseng, 2006). Cross-cultural variation in human behavior has been studied across individualistic and collectivistic cultures. According to Wang and Ollendick (2001) in the modern Western individualistic societies, behavior is explained in terms of individuality, self-actualization, independence is more valued, and freedom of expression is encouraged, whereas, in traditional collectivistic societies, group harmony, acceptance of others, dependency and self control is more valued.

Many cross-cultural researchers also believed that the manifestation of some forms of psychological problems such as psychotic problems is more or less in a universal way and considered abnormal throughout the world, whereas some other behaviors e.g. neurotic problems including anxiety and depression are considered to be a product of individuals' own experiences, family and social interaction and cultural environment (Gergen, Massey, Gulerce, & Misra, 1996; Kim, 2002; Saleem & Mahmood, 2009). Similarly, an individual's goals and his motivational efforts depend upon the particular cultural values and belief system (Markus & Kitayama, 1991). These cultural differences in the expression of depressive symptoms were also supported by various studies showing that individuals living in Collectivist societies tend to show more somatic symptoms, whereas, a predominance of affective and cognitive expression is found in more Individualistic cultures (Chang, 1985; Kirkmayer & Young, 1998; Kim, 2002).

It is also very important to note that depression remain un-detected and unrecognized particularly in Asian communities (Ballenger et al., 2001). Many explanations have been provided for the under-detection of depressive symptoms including the use of Western classification and definition of depression in non-Western societies, large variation in the presentation of depressive symptoms across cultures (e.g. somatic verses cognitive symptoms), and use of culturally alienated tools (Bhugra & Mastrogianni, 2004). It is also a well-established fact that language plays a central role in expression of psychological problems (Parker, Gladstone, & Chee 2001) and cultural ways of expression symptoms should also be taken into account while assessing and diagnosing a psychological disorder. In order to overcome such difficulties in assessing depressive symptoms, it is therefore, essential to use culturally appropriate and linguistically sensitive tools.

Depression is a condition that is not only influenced by culture but also the age and stage of adolescence. Presentation of the depressive symptoms is also influenced by the cultural background, the linguistic expression and the linguistic skills of an individual. As a common human expression and condition, it is also assumed that there would be some core symptoms of depression that may be found across various cultures and there may be some cultural – specific symptoms with different phenomenological experiences that may be found in a specific cultural community (Woo et al., 2004).

The above literature has revealed that depression is on the increase that remains unrecognized and undetected especially in children and adolescents (Costello, Erkanli, & Angold, 2006). Therefore, in order to have early identification, there is a great need of assessing depression with the culturally and linguistically appropriate self report measure. There is a paucity of empirical and psychometric research on depression in Pakistan. Only recently, a study was carried out to explore the depressive symptoms in Pakistani adolescents but it was only limited to school girls only (Naz & Siddiqui, 2010).

To sum up, the above review provides a rationale for developing a culturally sensitive self report measure to assess depressive symptoms among adolescents. Pakistan is a traditional and collectivistic culture where family cohesion and interpersonal relationships has been the core of an individual's life that ultimately shapes behavior and thinking pattern of an individual. It would be interesting to explore the cultural specific phenomenology of depressive symptoms in mainstream school context. This research will also focus on identifying depressive symptoms among normal school going adolescents rather than diagnosing them as having a rigid diagnostic disorder.

Aims and objectives
- To explore the experience, expression and manifestation of depressive symptomatology in adolescents.
- To develop a valid and reliable scale for measuring depressive symptomatology in adolescents.
- To determine the relationship of depressive symptomatology of adolescents with their self-concept.

Method

Participants and procedure
In order to explore the cultural-specific expression of adolescents, a phenomenological approach was used. For this purpose, 2 0 school teachers (10 male and 10 female) from 4 government schools of Lahore were selected who had minimum 5 years of teaching experience with the children of 12-18 years. These twenty class teachers were provided an operational definition and were asked to refer those adolescents (both boys and girls) to school counsellors with "low mood, lack of interest in studies and other social activities, remain isolated and withdrawn from class". Teachers referred 40 school children (23 girls and 17 boys) of grade 7th -10th. The mean age of the participants was 13.21 (*SD*, 1.18). All the referred 40 adolescents were interviewed using a semi structured approach to explore the manifestation of their presenting problems. Interviews were carried individually and open ended questions were asked. After interviews, the presetting problems of the 40 adolescents were collated and after the exclusion of repetition a list of 31 items was retained (Depressive Symptomatology Scale, DSS). As the items were the verbatim

of the individuals who were experiencing these symptoms, therefore, this list was found to have high face validity.

Participants and procedure
The final list of 27 items was further validated by the ten experienced and qualified school counselors with the minimum one year of experience of dealing, assessing and managing school children with different emotional and behavioral difficulties. The final list DSS was converted into a 6 point rating scale (0-5) where 0 means "Not at all" and 5 means" Very much". All the participants were asked "in the light of your clinical and school experience, rate each item to the extent in which this is a manifestation of depressive symptomatology among adolescents". After experts' ratings, a league table was made and all those items were excluded from the final list which got less than 90% agreement from the experts. In this way, 4 items were excluded and a list of 27 items was finalized for further analysis. Through this phase, the content validity of the scale DSS was also established.

Adaptation of Child Depressive Inventory

Procedure
The concurrent validity of the Depressive Symptomatology Scale (DSS) was established through the adapted version of Child Depression Inventory (CDI, Kovacs, 1992) which is a widely used measure for depression in children and adolescents. CDI is a self report measure of 27 items. Each item of the CDI is rated on a 3 point rating scale. The CDI has two forms long and short with 27 and 12 items respectively. The subscales of CDI are Negative mood, Interpersonal problems, Ineffectiveness, Negative Self-esteem and Anhedonia. For the current research, the long form of the CDI with 27 items was adapted into Urdu (National Language of Pakistan). Three clinical psychologists and two bilingual experts translated the items of CDI for the linguistic and conceptual equivalence with the actual items.

Pilot Study

Participants and procedure
The two scale DSS and CDI were piloted on 30 adolescents (15 girls and 15 boys) for checking the user friendliness and comprehension of the items. Both scales were found to be easy to understand and also the lay out was also user friendly.

Psychometric Phase

Participants
385 adolescents (51% girls and 49% boys) were selected through multistage sampling technique. The sample was divided into two main strata i.e. boys and girls. The two main strata were further divined according to educational level namely 8th, 9th and 10th grades. At the last stage, participants were selected systematically where every 5th child from each class was selected. The age range of the participants was 12-

18 with the mean age 14.49 (*SD* 1.46), the participants were selected from 4 government schools of Lahore (2 boys and 2 girls schools). The grade-wise distribution of the participants was in grade 8th (32%), 9th (35%) and 10th (33%) respectively.

Measures

Demographic performa

A demographic performa was developed to obtain the basic information of the participants including age, academic grade and the gender of the participants.

Depressive Symptomatology Scale (DSS)

An indigenous scale DSS was based on the expression of school children with 27 items. This is a self report measure, where higher the score means greater the depressive symptoms are. This is a 4 point rating scale where Not at All =0, Rarely =1, Sometimes =2 and Often = 3. The participants were instructed to rate each item to the extent in which it applies to them.

Child Depression Inventory (1992)

An adapted version of CDI (Kovacs, 1992) was used comprising 27 items with 3 point rating scale. The respondents rate their depressive symptoms by choosing one of the three options representing three levels of depression where higher the scores indicating a higher degree of depressive symptoms. CDI has five subscales; Negative mood, Interpersonal problems, Ineffectiveness, Negative Self-esteem and Anhedonia.

Self Concept Scale (SCS, Perveen, Saleem, & Mahmood, 2011)
Self Concept Scale was used to determine the discriminant validity of DSS/ It has 52 items with the response options of 0: Not at all, 1: Rarely, 2: Sometimes, 3; Often. SCS measure Positive Self-Concept and Negative Self-Concept. Higher the score denotes to high positive or negative self-concept.

Procedure

In the current research, official permission was obtained from the 4 agreed school authorities. All the school authorities we sent a brief aims, objectives and the utility of the research. School authorities were assured that all information would be kept confidential and institution name would remain anonymous. One the permission was granted, participants were selected systematically and they were tested in small groups averaging 25 each. All the participants were assured about the confidentiality, anonymity and privacy and they were given the right to withdraw them during any stage of testing. All those agree to participate were given the final research protocol and it took 20 minutes to complete. After every testing, a debriefing session was conducted for any quarries or questions from the participants. For retesting, 20% participants (*n*=76) who had their consent for retesting were retested after one week's interval.

Results

Psychometric properties of DSS

Principal Component Factor Analysis with Varimax Rotation and Scree Plot was used to explore the factor structure of DSS. The basic assumption to use Varimax rotation is to maximize the interpretability, simplification and maximize the variance of factors. The factors obtained through Varimax rotation are unrelated to one another (Kahn, 2006; Kim & Mueller, 1978). The Scree plot revealed a four factor solution. After item analysis all 27 items were retained. Items were retained on the basis of factor loading greater or equal than .30 (Kline, 1993).

Item analysis of DSA

Item analysis was also carried out while computing item-total correlation on 27 items of DSS. The table also shows high inter item correlation. The factor loadings of 27 items along with item analysis are given in the following table.

Figure 1
Scree plot Showing Extraction of Factors of Depressive Symptomatology Scale
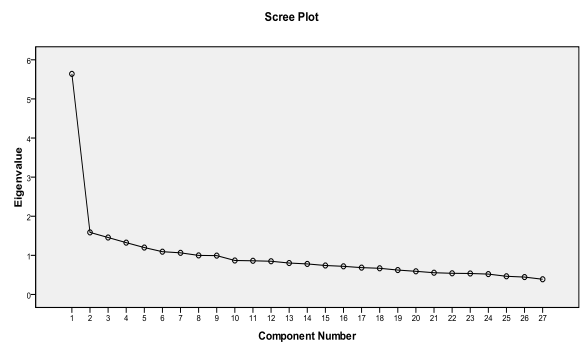
The scree plot shows the four factor solution as a best fit model of Depressive Symptomatology Scale for Adolescents.

Table 1

The Factor Structure and Item-Total Correlation of 27 Items of DSS

S. No	Item No	F1	F2	F3	F4	r
1.	3	.72	.08	.15	-.02	.53
2.	4	.64	.08	.03	.10	.44
3.	5	.50	.16	.15	.23	.35
4.	9	.58	.14	.14	.11	.38
5.	11	.42	-.01	.24	.23	.29
6.	25	.33	.29	-.04	.21	.24
7.	26	.52	.25	.20	-.07	.44
8.	27	.62	.16	.02	.08	.42
9.	13	.01	.49	.22	-.01	.34
10.	14	.20	.40	.28	.08	.28
11.	15	.29	.48	.14	-.13	.51
12.	16	.19	.59	-.05	.28	.46
13.	17	-.01	.64	.05	.14	.44
14.	18	.22	.54	.07	.18	.37
15.	24	.10	.64	.12	.14	.46
16.	I	.05	.16	.59	.19	.41
17.	2	.25	-.07	.34	.06	.21
18.	6	.12	-.03	.69	.09	.51
19.	19	.19	.11	.54	.17	.36
20.	22	.13	.18	.60	.06	.42
21.	23	.14	.22	.33	-.04	.22
22.	7	.02	.21	.03	.67	.51
23.	8	.23	.15	.06	.34	.23
24.	10	.12	.06	.09	.67	.48
25.	12	.05	.16	.24	.48	.32
26.	20	.20	-.03	.26	.35	.21
27.	21	.23	.07	.11	.60	.44
	Eigen values	3.19	2.60	2.19	2.02	
	% of Variance	11.82	9.63	8.14	7.47	
	Cumulative %	11.82	21.45	29.59	37.06	

Note: Items with .30 or above loading are boldfaced

Factor description

A descriptive label was assigned to each factors on the basis of the common theme emerged from the items.

Factor 1: Sadness

First factor consist of 7 items denoted to a deep sense of sadness and social withdrawal. The sample items included "prefer to be alone", "isolated", "feeling sad", "lost in one's own thoughts", "suicidal ideation" and so on.

Factor 2: Indecisiveness

The second factor consists of 7 items that denotes to a lack of ability of making decisions. Items examples are "inability to take initiatives", "lack of concentration", "fear of making mistakes", "fear of making decisions", "inability to solve problems effectively" and so on.

Factor 3: Irritability

The third factor comprising 6 items denotes to a great deal of irritation and being short tempered. The sample items include "irritability", "boredom", "losing temper easily", "inability to handle criticism" and so on.

Factor 4: Psychosomatic

There are 6 items loaded in the 4th factor denotes to the physical and muscular manifestation of tension. Sample items are "physical fatigue", "lack of sleep", "nervousness", "muscular pains" and so on.

Table 2

Summary of Inter-Correlations, Means, Standard Deviations and Cronbach 's Alpha of Four Factors, Total DSS and Positive and Negative Self Concepts Scales

Factors	F1	F2	F3	F4	FT	Positive SC	Negative SC
F1 Sadness	---	.54***	.45***	.44***	.84***	-.37**	.51***
F2 Indecisiveness	---	---	.40***	.41***	.78***	-.27*	.48***
F3 Irritability	---	---	---	.39**	.78***	-.17*	.31**
F4 Psychosomatic	---	---	---	---	.69***	.04	.21*
Total	---	---	---	---	---	-.42***	.49***
M	10.07	9.18	7.78	7.85	34.90	81.58	15.06
SD	5.25	4.28	3.62	3.34	12.70	11.11	6.03
Alpha coefficients	.84	.78	.81	.84	.86	.81	.73

df=384, *p<0.05, **p<0.01, ***p<0.001

The above table shows that the four subscales and total score on DSS have significant high positive correlation.

Discriminant validity

Moreover, above table also depicts the discriminant validity of DSS as a significant negative correlation was found between Positive Self-Concept and four factors and Total score on DSS. Also, a significant positive correlation was found between Positive Self-Concept and four factors and Total score on DSS.

Concurrent validity

The concurrent validity of the Depressive Symptomatology Scale was found with Child Depression Inventory (REF). The correlation between the total scores of two measures was found to be r=0.63 showing significant positive relationship between DSS and CDI.

Test retest reliability

The test retest reliability of DSS was established on 20% (n=76) with one weeks' interval. The DSS was found to have high test retest reliability of r=.89 (p<0.001).

Split half reliability

Split half reliability of DSS was established using Odd and Even method. The scale of 27 items was divided into two half comprising 13 and 14 items on each half respectively. The internal consistency of each half was found to be α= .78 and .81 respectively. The correlation between two halves was found to be r= .83(p<0.001) depicting that DSS has a split half reliability.

Figure 2
Mean Scores of Boys and Girls on four factors and Total
Score on DSS
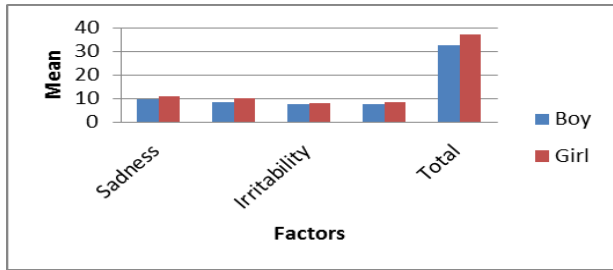
Table 3
*Means, Standard Deviations t and p- values of Boys (n=197)
and Girls (n=188) on Four Factors and Total Score on DSS*

Factors	Gender	*M*	*SD*	*t*	*p<*	95% CI		*Cohen's d*
						LL	UL	
Sadness	Boys	9.46	4.90	2.36	.019**	2.30	.21	.46
	Girls	10.71	5.54					
Indecisiveness	Boys	8.32	4.07	4.11	.001***	2.60	.92	.52
	Girls	10.08	4.33					
Irritability	Boys	7.47	3.37	1.76	.073 (ns)	1.38	.08	.19
	Girls	8.12	3.49					
Psychosomatic	Boys	7.36	3.06	3.02	.003***	1.68	.36	.38
	Girls	8.38	3.53					
DSS Total	Boys	32.61	12.17	3.67	.001***	7.19	2.18	.43
	Girls	37.29	12.84					

df =383**p0.01, ***$p<$0.001

The above table indicates the significant mean difference of boys and girls on the four factors and the Total score on DSS. The above table shows that boys and girls are significantly different on Sadness, Indecisiveness, Psychosomatic and Total score on DSS. Girls scored significantly higher than boys on Sadness, Indecisiveness, Psychosomatic and Total score on DSS. The table also shows that boys and girls are not significantly different on Irritability factor.

Discussion

Depression is a psychiatric disorder characterized by a sense of despondency, a decrease in activity, sadness and pessimism (DSM IV TR; APA, 2000). Depression may be a disorder or it may be a reaction to adverse life experiences or a change in the body's biochemistry or both (Essau, 2007). Diagnosis of depression is usually made when a certain number or types of symptoms persist for a certain period. There are some variations in the presentations in the symptoms of depression. There are four major sets of symptoms; affective, cognitive, somatic and biological in depression (Kirkmayer & Young, 1998). However, the composition symptoms can vary from person to person depending on the age, stage of development, biological predisposition, past experiences and quite interestingly the cultural background (Kim, 2002; Sung, 2010). Many experts

believe that depression in among the most common psychiatric disorders and that it is on the increase (Khalil et al., 2010). The treatment of choice is anti-depressant medication and cognitive therapy (Whitfield & Williams, 2003). Depression can affect psycho-social functioning of the individual (Frojd et al., 2008; Needham, 2009). The degree of dysfunction depends on severity of symptoms. This study was designed to assess the components of depression in adolescents an age group said to be vulnerable to this disorder.

Instead of diagnosis of depression, the nature and the types of components of depression were explored through a phenomenological approach. The scale based on the symptoms was administered on 385 school children (12-18 years old, with mean age 14.49 *SD*, 1.46). Factor analysis revealed four main factors named as Sadness, Indecisiveness, Irritability and Psychosomatic. There are some similarities between the above findings and the existing Western literature of which, Sadness, as denoted by symptoms like low mood and unhappiness was the most striking similarity to the Western concept of depression (Kovacs, 1992). However, the other three components, Indecisiveness, Irritability and Psychosomatic are less common as independent factors in the Western literature on depression (Kim, 2002). A mixture of anxiety and depression is included in CBCL (Achenbach, 1991). DSM IV-TR (2000) includes irritability as a part of the depressed mood, so is indecisiveness due to diminished ability to think or concentrate. In CDI (Kovacs, 1992) somatic concerns were acknowledged as aches and pains. Ahmed and Bhurga (2007) have stated that somatic symptoms were far more common in depression in the Eastern countries than in the West. As we can see the biological, psychological, affective and somatic factors almost universal in most cases of depression. However, when it comes to assessing depression, the relative weightage of each the major components should be taken into account. For example, when assessing someone from the North American continent, the questionnaire should contain more cognitive symptoms than somatic symptoms and vice versa for an Asian subject. Such adjustments to the composition inquiry would be very important to tap cultural-specific manifestations and expressions of depressive symptoms.

The indigenous scale (DSS) was found to have high internal consistency, test-retest reliability, and concurrent and discriminant validity. The girls' participants experience more depressive symptoms as compared to boys which is consistent with literature (Khalil et al., 2010). There could be number of possible explanation for this trend of results, firstly, as the age and stage of the current research participants is adolescence which itself is a risk factor for different mental health problems (Erol et al., 2010; Lewinsohn et al., 2003), secondly, girls especial are going through biological and pubertal changes that may resultant into more experience of depressive and low mood (Frank, & Young, 2000), and thirdly, changing social world and gender

specific roles and parental expectations may put adolescents girls at greater pressure. In traditional collectivistic and religious society like Pakistan, girls have lesser opportunities for social and emotional expression and they may have to play a role of a surrogate mother in larger families. Girls in our traditional families are not treated equally as their male counterparts; they are supposed to fulfill the familial roles and responsibilities more actively and efficiently than boys. There could be one methodological issue involved in the high reporting of depressive symptoms from girls that it might possible that girls express more freely somatic symptoms than boys.

To conclude, the main focus of the current research was to explore the expression and experience of depressive symptoms among adolescents both boys and girls. A valid and reliable scale was developed with the main purpose of screening and assessing the severity of symptoms rather than labeling the adolescents with a rigid diagnostic category. The scale (DSS) can be further use for research and clinical purposes. DSS can help to develop a profile system for an individual that can significantly contribute in the school counselling service in terms of assessment but also management of depressive symptoms. Also, an awareness and sensitivity can be promoted for teachers and parents for early and timely identification of depressive symptoms to avoid the serious and negative impact on social-emotional and academic functioning of the child.

Suggestions

On the basis of the findings of the current research, few suggestions were also made. Firstly, the Depressive Symptomatology can further be used to study other psychological variables among adolescents. Secondly, indigenous scale may lead to carried out a large prevalence study and to determine the risk and protective factors of depressive symptoms among adolescents. Thirdly, further research could also examine the sub-cultural, rural and urban differences in the experience of depressive symptoms. Finally, a similar study can be carried out to develop teacher and parent versions of DSS.

Limitations

There are few limitations that were also observed for the current research, firstly, as this study has taken into account only mainstream Government school children, future research could focus on private and madrassa school children as well. Secondly, keeping in view the limitation of self-report measure, a more indirect way could also be used to elicit depressive symptoms.

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