Didactic Therapy for Management of Stress and Co-morbid Symptoms of Depression and Anxiety in Pakistani Adolescents

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The current study was undertaken to empirically examine the efficacy of didactic therapy and the role of gender in the management of psychological stress and co-morbid symptoms of depression and anxiety in adolescents. In order to conduct the therapeutic intervention, a sample consisting of 100 adolescents (50 male and 50 female) between the ages of 12 to 18 years was screened from 600 adolescents (300 male and 300 female) on the basis of their high scores on the translated version of Depression Anxiety Stress Scale (Zafar & Khalily, 2014). The current study adopted a pretest-posttest control group experimental design. The important feature of this study was to provide didactic therapy (White, 2010) to the experimental group in comparison to the control group. In this context, the experimental group in contrast to the control group showed positive outcome of the therapy at the posttest. The control group did not show any statistical difference between pre- and posttest scores. The results further revealed that female participants did not differ significantly from male participants in both pretest and posttest conditions of didactic therapy. Overall, our results supported for the adoption of didactic therapy as an effective psychological intervention to manage stress and co-morbid symptoms of depression and anxiety in adolescents.

Keywords: Adolescents, psychological stress, co-morbidity, depression, anxiety, didactic therapy, gender

Adolescence is thought to be a stressful phase for adolescents (Dekovic & Meeus, 2006; Spear, 2000; Zimmer-Gembeck & Skinner, 2008) as adolescents are overwhelmed by inevitable complex normative changes. These may include changes in emotions,

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personality, social contexts, and relationships with others (McElhaney, Allen, Stephenson, & Hare, 2009). This pubertal growth is accompanied by social expectations, roles, and responsibilities, which aggravate adolescents' reactivity to stress that interfere with their cognitive strategies to manage stressful experiences. Researchers have documented findings, which suggest that depression, anxiety, and stress are forms of general affective psychological distress, which may be manifested in different ways (Lovibond & Lovibond, 1995a, 1995b). It has been found that the onset of these emotional states increase with due course from childhood to adolescence and are the most common problems in adolescents (Kessler et al., 2005), especially, among girls (Bouma, Ormel, Verhulst, & Oldehinkel, 2008; Costello, Foley, & Angold, 2006).

There is extensive research on the co-morbidity of anxiety and depression in adolescence (Angold & Costello, 1993). It has been found that continual stress causes the depletion of the body's resources and consequently, the individual under stress no longer seems to be able to cope with stresses of life and become vulnerable to depression and anxiety, which may co-occur (Graber & Sontag, 2009; Mineka, Watson, & Clark, 1998). Hence, there are a number of explanatory factors that may contribute in the development of depression and anxiety and among those factors, stressful events are the most common (de Graaf, Bijl, ten Have, Beekman, & Vollebergh, 2004; Hovens et al., 2010). As the symptoms of anxiety and depression tend to co-occur with stress symptoms, hence, these disorders have overlapping diagnostic criteria.

Young people need to successfully cope with the changes that adolescence stage evokes; and as and when they are unable to cope with these challenges, they consequently become vulnerable to depression and anxiety (Graber & Sontag, 2009), which hamper adolescents' educational, social, and emotional development. Moreover, stress in adolescents is deleterious and affects the wellbeing and healthy development of adolescents (Grant, Compas, Thurm, McMahon, & Gipson, 2004; McLaughlin & Hatzenbuehler, 2009).

Research findings suggest that male and female adolescents have different vulnerabilities for psychological stress. According to Frydenberg (1997), gender socialization plays a significant role in managing of stress in boys and girls. He found that girls appraise stressful events more threatening than boys. Hampel, Meier, and Kummel (2008) found that adolescent girls are more affected by stressful situations that lead to internalizing problems, such as depression. Research findings also suggest that girls increasingly

manifest stress and seek help for stressful issues more than boys (Hampel & Peterman, 2006; Washburn-Ormachea, Hillman, & Sawilowsky, 2004). Similarly, Jose and Radcliffe (2004) noted that girls experience more stressful events than boys from age 12 to 17.

Research conducted in Pakistan also showed a significant association of gender with stress, whereby female adolescents reported higher level of stress as compared to male adolescents (Farooqi & Habib, 2010; Parpio et al., 2012). In this context, high level of stress in Pakistani women may be attributed to the process of socialization, where they are socialized in a manner to become more dependent, insecure, passive, and emotional as compared to their male counterparts. Moreover, the stereotypical process of socialization enhances their susceptibility to depression and anxiety when they encounter different stressful events (Farooqi & Habib, 2010).

An individual managing with stress involves coping skills. Coping has been defined as 'the process of using cognitive and behavioral strategies to manage or alleviate the perceived stress and the resultant affective state' (Taxis, Rew, Jackson, & Kouzekanani, 2004, p. 478). Most of the stress-management interventions focus on the ways of coping with stressful conditions (Skinner & Zimmer-Gembeck, 2007). In this context, adolescents need to be taught functional coping strategies, so that they may deal with stressors effectively. Strategies for coping with stress may include problemsolving, support-seeking, physical activity, monitoring, self-talking, and cognitive restructuring (Donaldson, Prinstein, Danovsky, & Spirito, 2000). Relaxation exercises and breathing techniques also help relieve bodily pains (Christensen & Fatchett, 2002). However, learning to regulate one's emotions and to behave in adaptive and socially appropriate manner is an important part of human development (Morris, Silk, Steinberg, Myers, & Robinson, 2007).

Researchers suggest that group therapy is effective for adolescents having deficits in social skills (Calhoun, Bartolomucci, & McLean, 2005) and experiencing other psychological problems such as anxiety and depression (Edelman & Remond, 2005). Research has also demonstrated that social support which can be in the form of advice, guidance, emotional support, and assistance can help to struggle with stress (Hair, Jager, & Garrett, 2002). Likewise, researchers have found that mentoring helps in promoting healthy social development (Rhodes, Grossman, & Roffman, 2002).

Stress during adolescence is normative, but there is a lack of provision of adequate programs to guide young people during this period of life. Didactic therapy is one of the evidence-based therapies that emphasize psycho-education to manage stress in individuals (White, 2010). Didactic therapy has the efficacy to turn the individuals with stress into their own `therapists' so as to enable them to deal with present and future problems (White 2008). It integrates various theories of clinical practice including cognitive-behavioral theory, ecological systems theory, social support models, learning theory, stress and coping models, group-practice models, and narrative approaches (Anderson, Reiss, & Hogarty, 1986; McFarlane, Dixon, Lukens, & Lucksted, 2003). Psycho-education has the potential for decreasing psychological problems and improving social functioning of the clients (Dyck, Hendryx, Short, Voss, & McFarlane, 2002; Kingery et al., 2006; Montero et al., 2001).

According to Zinck and Littrell (2000), research on adolescents' stress-management is scarce. Hence, the current research addressed a very important issue that is to evaluate the effectiveness of didactic therapy (White, 2010) in improving adolescents' coping skills for stress-management. Investigating this phenomenon would provide a foundation for psychological intervention services for stress-management. It was anticipated that the participants provided with didactic therapy would gain awareness of the stressors in their lives and learn stress-management strategies. However, gender differences regarding the study variables need to be explored extensively in the context of therapeutic intervention.

Hypotheses

Following hypotheses were formulated for the current study:

- 1. Experimental group have significantly low scores in the posttest on depression, anxiety, and stress than participants in the control group.
- Female adolescents' scores at pretest and posttest are higher on depression, anxiety, and stress as compared to the scores of male adolescents.

Method

Sample

The adolescent sample (N = 600) aged 12 to 18 years (M = 15.14, SD = 1.98) was taken from the educational institutions of Rawalpindi and Islamabad (Pakistan). Equal number of participants (n = 200) was

taken from each school system (i.e., Urdu medium, English medium, and Federal Government educational institutions) Furthermore, from the adolescent sample (N=600), a sample of 100 adolescents (50 male and 50 female) were screened as per the severity-rating index of Depression Anxiety Stress Scale (DASS) determined by Lovibond and Lovibond (1995a) for conducting psychological intervention for stress-management. Hence, the inclusion criteria applied to the current study was male and female adolescents between the ages of 12 to 18 years who scored greater than 110 on DASS to be selected for providing psychological intervention.

Instrument

Depression Anxiety Stress Scale (DASS). In the current study the translated version of Depression Anxiety Stress Scale (Zafar & Khalily, 2014) originally developed by Lovibond and Lovibond (1995a) was used. DASS was used to assess and capture stress and stress-related disorders. Each of the three subscales of DASS that is Depression, Anxiety, and Stress contained 14 items. Participants were asked to use 4-point severity/frequency scales to rate the extent to which they have experienced each state over the past week. Scores for each subscale were calculated by summing the scores for the relevant items. Items measured symptoms of each emotional state and associated physical arousal during the past week and were scored on a 0 to 3 scale with (0) did not apply to me at all and (3) applied to me very much, or most of the time. Alpha reliability coefficient of translated version was reported as .83 for overall DASS and .63, .60, and .60 for Depression, Anxiety, and Stress subscales, respectively (Zafar & Khalily, 2014). Higher scores on this measure showed higher levels of depression, anxiety, and stress. DASS was administered on the participants of the study in the pretest and posttest.

Procedure

Study was pretest-posttest control group design involving random assignment of participants to the intervention and the use of standardized measure for the assessment of psychological stress in adolescents.

The current study basically pertains to provide intervention to those adolescents who met research diagnostic criteria for psychological stress. Furthermore, Didactic therapy (White, 2010) designed for stress-management in adolescents was adopted. Ethical considerations according to American Psychological Association guidelines were followed in conducting the study. Initially, adolescents (N=600) were taken from different educational institutions with the consent of head of respective institutions. Participation in the study was on voluntary basis. The participants' informed consent was secured and anonymity was guaranteed to them. Data were collected from the participants through collective testing sessions organized by the educational institutions. From these adolescents, a sample of 100 adolescents (n=50 males and n=50 females) were screened on the basis of their high scores on DASS for conducting psychological intervention for stress-management.

These adolescents (N=100) were further divided into four subgroups; two female (experimental and control) and two male (experimental and control) adolescent groups for the therapeutic sessions. Each group comprised of 25 participants. These participants met research diagnostic criteria of scoring greater than 110 on DASS at pretest. Moreover, these participants were screened on the basis of severity and manifestation of their symptoms as determined by their scores on DASS.

DASS was administered four weeks before the experimental treatment was carried out. The participants of the control group did not differ largely from the participants in the experimental group in terms of their scores on DASS at pretest. The information booklet that is Urdu version of Didactic therapy for stress-management (White, 2010) was obtained with permission to be used in the current study. It was disseminated to the experimental group (which comprised of adolescents from different educational institutions and formed a class as per requirement of the didactic therapy). The experimental group was exposed to six didactic therapeutic sessions in a classroom format, spread over eight weeks with an average of 90 minutes duration per session under the supervision of a licensed Clinical Psychologist.

The didactic therapy (White, 2010) for the experimental group comprised of a prescribed curriculum that focused on stress-management strategies (appraisal and coping) related to health care, obtaining social support, relaxation, and cognitive behavioral techniques. Didactic therapy sessions also comprised of didactic presentations that focused on predominant issues among adolescents that included life transitions, self-image, and difficulties in interpersonal relationships. During the group sessions, the participants were given practice work sheets that dealt with regulation of emotions and behavior. The control group was provided with a brochure

highlighting stress as a problem (developed in Urdu language by the researchers) without any additional information regarding how to manage stress or therapeutic sessions. The posttest (administration of DASS) of both the groups was carried out one week after the last treatment session with the experimental group. Hence, the current study focused on the impact of didactic therapy to manage stress in adolescents.

Results

The results of the current study were analyzed using SPSS 17 version. Descriptive analyses, independent sample *t*-test, and paired sample *t*-test were used to examine the variables under study. Furthermore, 2 (gender: male and female) x 2 (treatment condition: pre and post DASS) x 2 (group: control and experimental group) mixed factorial design with repeated measure was used.

Table 1 Descriptive Statistics for DASS and Its Subscales (N = 600)

| Scales | Items | M | SD | α | Range Potential Actual | | Kurtosis | Skewness |
|------------|-------|------|-----|-----|---------------------------|-------|----------|----------|
| DASS | | | | | 0-126 | | | .07 |
| Depression | 14 | 32.1 | 5.1 | .63 | 0-42 | 19-42 | 79 | 02 |
| Anxiety | 14 | 32.4 | 4.8 | .60 | 0-42 | 20-42 | 61 | 10 |
| Stress | 14 | 33.0 | 4.4 | .60 | 0-42 | 21-42 | 53 | 10 |

Findings in Table 1 show that the alpha reliability coefficients of DASS and its subscales demonstrate sound internal consistency of the scale. Means and standard deviations show that sample has scored high on Stress as compared to other domains, nevertheless, much variability in responses is evident for Depression subscale. Skewness and kurtosis were computed to check the assumptions of normality. The results show that skewness and kurtosis values are falling within acceptable range.

Table 2 displays the mean differences between male and female adolescents on the pre- and posttest scores of participants on DASS and its subscales. Nonsignificant mean differences between male and female adolescents on the score of DASS and its subscales are observed.

Table 2

Means, Standard Deviations, and t-values on DASS and Its Subscales for Gender Differences on Pretest and Posttest Scores (N = 100)

| | Male | Female | | | | | | |
|----------------|-------------|-------------|-------|-----|------|-----------|---------|--|
| | (n = 50) | (n = 50) | | | 95% | <u>CI</u> | Cohen's | |
| Scales | M (SD) | M(SD) | t(98) | p | LL | UL | d | |
| Pretest score | S | | | | | | | |
| DASS | 100.9(16.4) | 103.2(17.3) | .67 | .50 | 8.97 | 4.41 | 1.14 | |
| Depression | 33.6(5.7) | 34.8(5.9) | 1.0 | .29 | 3.50 | 1.06 | 0.21 | |
| Anxiety | 33.4(5.9) | 34.0(6.4) | .50 | .62 | 3.07 | 1.83 | 0.10 | |
| Stress | 33.9(5.9) | 34.4(5.9) | .37 | .71 | 2.79 | 1.91 | 0.07 | |
| Posttest score | es | | | | | | | |
| DASS | 85.3(22.1) | 85.8(17.6) | .15 | .88 | 8.56 | 7.32 | 0.03 | |
| Depression | 28.2(7.3) | 28.7(6.3) | .30 | .76 | 3.12 | 2.28 | 0.06 | |
| Anxiety | 28.3(8.0) | 28.5(6.4) | .15 | .88 | 3.12 | 2.68 | 0.03 | |
| Stress | 28.8(7.7) | 29.8(6.5) | .74 | .46 | 3.89 | 1.77 | 0.14 | |

Note. CI = Confidence interval; LL = Lower limit; UL = Upper limit.

Table 3 shows the means, standard deviations, and *t*-values of male and female participants within the experimental and control groups at pretest and posttest scores.

Table 3 Means, Standard Deviations and t-values on Pretest and Posttest of Experimental Groups and Control Groups on DASS and Its Subscales (N=100)

| | Pretest | Posttest | | | | 95 % | CI (| Cohen |
|--------------|-------------|-------------|-----|-------|-----|-------|-------|-------|
| Variables | M(SD) | M(SD) | r | t(24) | p | LL | UL | d |
| Experimental | Group Male | | | | | | | |
| DASS | 100.0(17.2) | 66.5(4.0) | 14 | 9.19 | .00 | 26.06 | 41.14 | 2.68 |
| Depression | 34.1(5.4) | 22.4(2.1) | 05 | 9.84 | .00 | 9.23 | 14.13 | 2.83 |
| Anxiety | 33.2(6.2) | 21.9(3.3) | 09 | 7.66 | .00 | 8.27 | 14.37 | 2.25 |
| Stress | 32.7(6.2) | 22.1(2.5) | 07 | 7.64 | .00 | 7.74 | 13.46 | 2.22 |
| Control Grou | p Male | | | | | | | |
| DASS | 101.8(15.8) | 104.0(15.8) | .68 | .87 | .39 | -7.39 | 2.99 | .14 |
| Depression | 32.9(5.9) | 34.0(5.9) | .70 | 1.14 | .26 | -2.92 | .83 | .18 |
| Anxiety | 33.6(5.6) | 34.5(6.1) | .69 | .99 | .33 | -2.83 | .99 | .16 |
| Stress | 35.2(5.2) | 35.4(4.8) | .65 | .28 | .78 | -1.99 | 1.51 | .05 |

Continued...

| | Pretest | Posttest | | | | 95 % | CI (| Cohen |
|--------------|--------------|-------------|-----|-------|-----|-------|-------|-------|
| Variables | M(SD) | M(SD) | r | t(24) | p | LL | UL | |
| Experimental | Group Female | • | | | | | | |
| DASS | 104.0(18.3) | 70.6(4.6) | .00 | 8.83 | .00 | 25.60 | 41.20 | 2.49 |
| Depression | 35.3(5.4) | 23.3(2.7) | .11 | 9.56 | .00 | 9.41 | 14.59 | 2.75 |
| Anxiety | 34.4(6.7) | 23.3(2.8) | 04 | 7.45 | .00 | 8.01 | 14.15 | 2.13 |
| Stress | 34.3(6.2) | 24.0(2.2) | 16 | 7.37 | .00 | 7.43 | 13.21 | 2.19 |
| Control Grou | p Female | | | | | | | |
| DASS | 102.4(16.5) | 101.0(11.5) | .97 | 1.07 | .29 | -1.21 | 3.85 | .09 |
| Depression | 34.2(5.8) | 33.9(3.8) | .90 | .42 | .68 | 94 | 1.42 | .05 |
| Anxiety | 33.7(6.2) | 33.6(4.8) | .91 | .22 | .82 | 01 | 1.25 | .02 |
| Stress | 34.4(5.8) | 35.6(3.1) | .71 | 1.42 | .16 | 29 | .53 | .26 |

Note. n = 25 for all groups. CI = Confidence interval; LL = Lower limit; UL = Upper limit

The results in Table 3 indicate that there is an improvement in the scores of male and female participants in the experimental groups who were provided with didactic therapy that is scores on DASS and its subscales significantly reduced on posttest. The results also indicate that the condition of male and female participants in the control groups does not improve at posttest, as they were not provided with any treatment.

Table 4 Group Differences along Gender, Group Type, and Condition on DASS and Its Subscales (N = 100)

| - | DASS | | Depressi | | Anxiet | | Stress | |
|----------------|---------|----------------|----------|----------------|---------|----------------|---------|----------------|
| | | | on | | У | | | |
| | F | $\eta_P^{\ 2}$ | F | $\eta_P^{\ 2}$ | F | $\eta_P^{\ 2}$ | F | $\eta_P^{\ 2}$ |
| Gender | .37 | .00 | .931 | .01 | .21 | .00 | .95 | .01 |
| Groups | 0.66** | .35 | 33.80* | *.26 | 38.68** | .29 | 80.45** | .46 |
| Condition | 123.22* | .56 | 126.30** | *.57 | 84.02* | .47 | 71.42* | .43 |
| Condition | 129.87* | .57 | 144.58* | *.60 | 96.93* | .50 | 94.10* | .49 |
| x Groups | | | | | | | | |
| Condition | .311 | .00 | .618 | .01 | .12 | .00 | .29 | .00 |
| x Gender | | | | | | | | |
| Condition x | .39 | .00 | .222 | .00 | .29 | .00 | .09 | .00 |
| Groups x Gende | er | | | | | | | |

^{**}p < .000. *p < .001.

^{***}p < .001. **p < .01. *p < .05.

Table 4 shows significant main effect of groups (experimental and control), indicating that experimental and control groups differ significantly on DASS and its subscales scores, while nonsignificant main effect of gender of participants is observed, hence showing no gender differences on depression, anxiety, and stress. The significant main effects of condition indicate that participants differ in their responses on DASS and its subscales in pretest and posttest conditions. A significant interaction between condition and groups is found, which suggests that scores on DASS and its subscales significantly differed in pretest and posttest measurements between experimental and control groups. However, nonsignificant interaction is observed between condition (pretest and posttest measurements) and gender, which indicates that pattern of scores on DASS and its subscales across two measurement conditions do not significantly differ between male and female adolescents. For respective means and standard deviations see Table 3.

Estimated marginal means and the interaction graphs (as displayed in Figures 1, 2, 3, and 4) show that the scores of experimental and control groups on DASS and its subscales are high in a pretest condition, but in posttest condition the scores of the experimental group become low showing improvement due to treatment effects, while the control group shows stability in the responses on DASS and its subscales across pretest and posttest measurements. There is nonsignificant interaction observed among condition, groups, and gender.

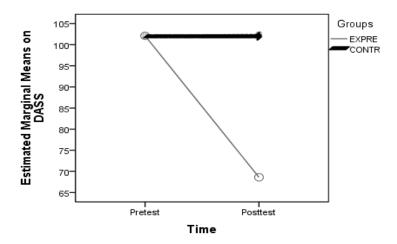


Figure 1. Graphical representation showing scores of experimental and control groups on DASS at pretest and posttest conditions.

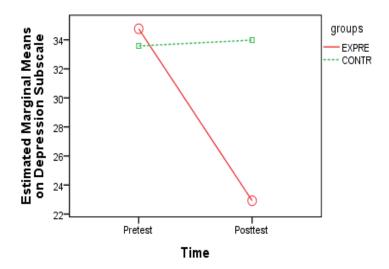


Figure 2. Graphical representation showing scores of experimental and control groups on depression at pretest and posttest conditions.

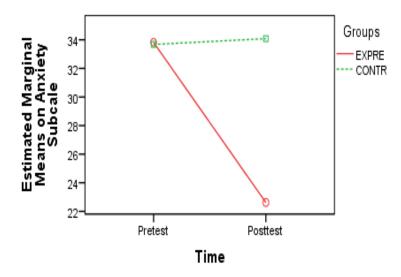


Figure 3. Graphical representation showing scores of experimental and control groups on anxiety at pretest and posttest conditions.

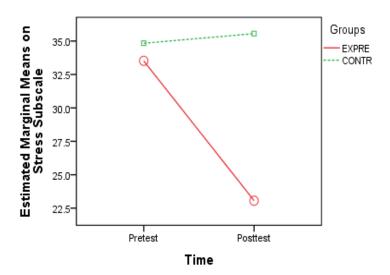


Figure 4. Graphical representation showing scores of experimental and control groups on stress at pretest and posttest conditions.

Discussion

The current study was carried out to empirically examine the efficacy of didactic therapy (White, 2010) and establish its effectiveness in improving adolescents' capacities to cope adaptively with stressful situations and life events. It was also designed to study the role of gender in the management of psychological stress and comorbid symptoms of depression and anxiety in adolescents. DASS (Zafar & Khalily, 2014) was administered to the experimental and control groups at pretest and after therapeutic sessions at posttest. The application of didactic therapy (White, 2010) to the experimental group helped in improving stress and co-morbid symptoms of depression and anxiety in adolescents.

Our first hypothesis that experimental group managed with didactic therapy have significantly low scores on the scale of psychological stress than participants in the control group, has been proved. After experiencing psychological intervention, the scores of the participants in the experimental group showed diagnostic improvement in the specified period of the study and reported significantly lesser symptoms of stress, anxiety, and depression. They developed a better sense of stress-management strategies and showed lesser passivity and avoidance in meeting new and challenging

situations. The findings of the current study corroborate previous researches (Dyck et al., 2000; Montero et al., 2001; Romano, 1992) which suggested the efficacy of psycho-educational techniques for alleviating psychological problems. These findings also emphasize on the need to practice stress-management programs in educational institutions, so as to develop healthy strategies in adolescents to deal with the stressors and challenging life events.

In line with these previous researches, the current study has also revealed the positive effects of didactic therapy which helped in curbing psychological stress and co-morbid symptoms of anxiety and depression in adolescents. However, it proved most efficacious for depression for which effect size is larger than other domains. Clinical and nonclinical studies suggest a strong relationship between stressful events of life and depression (Lloyd, 1980). The results further revealed that depression also has greater main effect for condition, whereas, stress has greater main effect for groups. Didactic therapy (White, 2010) employed for stressful adolescents in the current study focused on stress-management strategies (appraisal and coping) related to health care, obtaining social support, relaxation, and cognitive behavioral techniques. Relaxation exercises and cognitive behavioral techniques dealt with adolescents' regulation of emotions and behavior.

Consistent with previous research (Sloman, 2002), our research findings also indicated more effectiveness of didactic therapy on depression than anxiety and stress for condition. The cognitive behavior strategies helped adolescents in the experimental group in identifying negative thoughts, replacing those with rational thoughts, and managing stress-related symptoms. Hence, our findings demonstrate that didactic therapy can play an important role in averting the potential consequences of maladaptive coping and stress. These findings support previous researches (Hampel et al., 2008; Puskar, Sereika, & Tusaie-Mumford, 2003) which emphasize the importance of having such psychological interventions for managing stress in adolescents. Adolescents' acquisition of the stressmanagement strategies helped in reducing the deleterious effects of stress and the co-morbid symptoms of anxiety and depression in the participants of the experimental group. Didactic therapy provided the adolescents a shared atmosphere for change to cope with a range of stressful events and situations and gain new perspectives to use effective coping mechanisms to manage variety of stressors. It further helped the adolescents to envision positive options to solve problems and to foster healthy functioning. Hence, there is considerable

empirical support for potential rigorous benefits of the didactic therapy (White, 2010) that meets the standards of clinical adequacy.

As far as the role of gender in the management of psychological stress and co-morbid symptoms of depression and anxiety in adolescents is concerned, we did not find a significant interaction effect of gender × condition. Our results demonstrated that there exists nonsignificant difference in stress-management of boys and girls. One reason for this might be that our results are limited to answers provided by adolescents who volunteered to participate in the research study. Moreover, our sample size was also small to detect differences. The current study has also demonstrated that the female participants benefitted more than male participants from the treatment provided to them in the form of didactic therapy as the scores of male and female participants at posttest indicate, however, the difference is nonsignificant. In this context, a number of personal and situational factors may influence an individual's appraisal of the situation. Elkind (2001) documented that how children respond to stress depends upon their perception of the stress situation, the amount of stress they experience, and the availability of effective coping mechanisms. However, further research is needed to elucidate these intricate processes and enhance our understanding of the significance that should be ascribed to adolescents' stresses which impede the development during adolescent years.

Limitations and Suggestions

Limitations acknowledged regarding the current study are as follows:

- 1. Issues such as sample size and sampling strategies may be reviewed in future studies.
- 2. One of the most critical aspects of didactic therapy is the time limited aspect. Longitudinal post-intervention studies with follow-up periods would be beneficial to further examine the endurance of therapeutic effects.
- 3. Follow-up data may be collected in order to assess the progress of participants and to determine the long-term benefits and effectiveness of didactic therapy for stress-management in adolescents.
- 4. Blinding techniques should be incorporated in future studies, so as to minimize selection bias for differential treatment or assessments of outcomes.
- 5. It would be beneficial for future research if data may be included from multiple sources (such as from caregivers,

- schools, peers, etc.) in order to assess the behavioral changes with respect to stress in adolescents.
- 6. The treatment of the control group needs to be addressed by future researchers adequately, as it was not rigorously standardized in the current study.

Implications of the Study

There are many anticipated benefits of the current study:

- The current study would certainly enhance our understanding of stress-management techniques and would prove to be effective in understanding the significance that may be ascribed to adolescents' stresses, which impede the development during adolescent years.
- 2. Developing stress-management skills in adolescents would improve their social and academic outcomes.
- 3. Didactic intervention plan would be of direct practical use to parents, adolescents, educationists, health professional, researchers, organizations, and to the community at large.

Conclusion

Based on the findings of the current study, didactic therapy has appeared to be an effective modality for the adolescent population. It is, therefore, recommended that didactic therapy may be adopted as an effective intervention module to manage stress in adolescents.

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