



IMPACT OF COGNITIVE BEHAVIOR THERAPY ON PSYCHOLOGICAL WELL-BEING AND COPING STRATEGIES AMONG ADOLESCENT STUDENTS.

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ABSTRACT

Background: Adolescence is the most crucial stage in the human life span. At this stage adolescents undergo many challenges and issues. These challenges and issues may affect on their mental health and increase many psychological problems.

Objective: To study the impact of Cognitive Behavior Therapy (CBT) on Psychological Well-being and Coping Strategies among Adolescent students.

Sample & Methods: Pre and Post experimental design study was carried out with the total sample of 200 adolescent students (100 Experimental Group, and 100 Control Group) who had scored low scores on Psychological well-being which was measured by using Psychological Well-being Scale developed by SudhaBhogale and Indira Jai Prakash (PWB Scale, 1995), and low scores on problem focused coping which was measured by The Coping Orientation of Problem Experience Inventory (The COPE; Carver et al., 1989).

Results: In this study it was hypothesized that Cognitive Behavior Therapy will have a positive impact on enhancing Psychological Well-being and Problem Focused Coping strategies in adolescents. Cognitive Behavior Therapy was given to the Experimental Group for a period of 14 weeks. Post-test data on Psychological Well-being and Coping Strategies were obtained from both Experimental and Control Groups.

Conclusion: The findings have implications for future intervention studies aiming at improving psychological well-being, enhancing adaptive coping strategies and decrease other acute psychological disorders.



KEYWORDS: Cognitive Behavior Therapy(CBT), Psychological Well-being, Coping Strategies Adolescents.

INTRODUCTION

Psychological Well-Being in Adolescence:

As revealed in Psychological well-being theory individuals' psychological wellbeing relies upon his positive thinking process in various parts of his life. The person ought to have in constructive association with others; ought to have control over environment; ought to acknowledge himself his errors and his past; ought to have a particular goal and legitimate significance of his life; ought to have self-growth and development, and ought to be able to settle on his own choices (Özen, 2005). Hence, there is a potential pressure between psychological well-being, happiness, and growth (Ryff and Singer, 1996). Psychological well-being takes a significant part in personal identity and development of theories both hypothetically and practically. Psychological well-being, which guides clinical investigations that will enable counsellors to make

their advisees to achieve their objectives, illuminates about the goals and purposes with respect to psychological counselling (Christopher, 1999).

Coping Strategies in Adolescence

Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events. In coping with stress, people tend to use one of the three main coping strategies: either *Avoidant focused*, *problem focused*, or *emotion focused* coping. (Weiten et al., 2006). *Avoidant focused* strategies occur when the person modifies the way they think. For example, employing denial, or distancing oneself from the problem. People may alter the way they think about a problem by altering their goals and values, such as by seeing the humor in a situation. People using *problem focused* strategies try to deal with the cause of their problem. They do this by finding out information on the disease, learning new skills to manage their disease and rearranging their lives around the disease. *Emotion focused* strategies involve releasing pent-up emotions, distracting one-self, managing hostile feelings, meditating, using systematic relaxation procedures. Men often prefer problem focused coping, whereas women can often tend towards an emotion focused response. Problem focused coping mechanisms may allow an individual greater perceived control over their problem, while emotion focused coping may more often lead to a reduction in perceived control. Certain individuals therefore feel that problem focused mechanisms represent a more effective means of coping. (Nicholls & Polman, 2006).

Assuming that Psychological well-being is important for people's adaptive coping, productive research has focused on studying whether some coping mechanisms are more adaptive than others. Although the contextual nature of coping suggests that one strategy can be adaptive in one context but not in others (Endler et al., 1994), problem focused or problem approach coping is generally considered more adaptive than avoidant coping and emotion centered (Gustems-Carnicer and Calderón, 2013; Syed and Seiffge-Krenke, 2015). Problem approach coping concentrated on the cognitive, emotional, or behavioral strategies aimed at either resolving the stressful situation or modifying the underlying negative emotions. Conversely, avoidant coping concentrated on the adoption of cognitive, emotional, or behavioral strategies aimed at avoiding having to deal with the problem or negative emotions that would result from the stressful situation (Endler and Parker, 1990). The most adaptive strategies for addressing academic demands are planning, seeking instrumental support, seeking comfort (emotional support), self-support (encouraging oneself), and commitment to the tasks. However, experiencing cognitive confusion, being mentally estranged from the problems, hiding the problems from people who are close, systematically blaming oneself for all evils, ruminating on the problems, and projecting the responsibility for all negative matters onto others constitute dysfunctional strategies for students, given that they hinder the completion of the task and even increase emotional distress, finally it affects negatively on psychological well-being of an individual.

The present study has focused on implementing the cognitive behavior intervention techniques in enhancing the psychological well-being and adopting positive coping strategies.

Cognitive Behavior Therapy (CBT)

Cognitive Behaviour Therapy (CBT) is a psychotherapeutic approach, which aims to alleviate distress by modifying cognitive content and process, realigning thinking with reality. Cognitive Behavioural therapists identify and treat difficulties arising from an individual's irrational thinking, misperceptions, dysfunctional thoughts and faulty learning. CBT includes cognitive techniques as well as behavioural components. The former emphasizes on recognizing and challenging negative thoughts and maladaptive beliefs while the latter involves graded task assignments, pleasant events scheduling as well as other skills training such as relaxation skills, communication skills, assertiveness skills and problem solving skills (Soloman & Haaga, 2004).

Aim: To study the Impact of Cognitive Behavior Therapy on Psychological Well-being and Coping Strategies among Adolescent Students.

Objectives:

1. To study the Impact of Cognitive Behavior Therapy on Psychological Well-Being among adolescent students.
2. To study the Impact of Cognitive Behavior Therapy on enhancing adaptive coping strategies among adolescent students.

Hypotheses:

1. Cognitive Behavior Therapy will have a positive impact on enhancing the psychological well-being among adolescent students.
2. Cognitive Behavior Therapy will have a positive impact on enhancing the adaptive coping strategies among adolescent students.

Participants

For the present study 440 adolescent students from different High schools and Pre University colleges in Bengaluru Rural and Tumakuru, Karnataka, were taken and administered Psychological Well-being questionnaire and COPE inventory. Finally 120 adolescents were selected who scored high on Psychological distress with low scores on Psychological Well-being. They were randomly assigned to Experimental Group (N=60) and Control Group (N=50) with 30 boys and 30 girls in each group.

Measures

Psychological well-being scale: This PWB scale used in the study was developed by SudhaBhogale and Indira Jai Prakash (1995). This scale consists of 26 items and measures PWB in 13 dimensions such as meaninglessness, somatic symptoms, self esteem, positive affect, daily activities, life satisfaction, suicidal ideas, personal control, social support, tension, wellness, and general efficiency. The split of reliability coefficient is 0.91, and test retest co-efficient is 0.71. The obtained con-current validity co-efficient of the scale is 0.62.(by correlating it with subjective well-being questionnaire, developed by Nagpal& Sell) and 0.48(correlating with general well-being scale developed by Verma and Verma).

The Coping Orientation of Problem Experience Inventory (The COPE; Carver et al., 1989): The COPE was developed to quantify individual styles of coping (Carver et al., 1989). It is a 60-items self-report survey with a four-point Likert scale (1 – I usually don't do this, 2 – I usually do this a little bit, 3 – I usually do this a medium amount, 4 – I usually do this a lot).The COPE has a good reliability ($r = .45 - .60$) and test re-test scores ($r = .45 - .86$) over an eight week period in a college students (Carver et al., 1989). Connections between's inquiries were acceptable.The COPE demonstrated good convergent validity with the Cope Strategy Indicator (CSI; Tobin, Holroyd, and Reynolds, 1984) and the Ways of Coping Revised (WOCR;Folkman and Lazarus, 1988) ($r = .55 - .89$) and a strong divergent validity.

Procedure:**Stage I: Screening/Pre-test:**

In this stage, Psychological well-being scale and COPE inventory were administered to a large sample 440 adolescent students. Finally, 120 adolescent students who scored low scores on Psychological well-being and problem focused coping, and willing to participate in the study were selected. 60 boys (30 for experimental and 30 for control groups) and 60 girls (30 for experimental and 30 for control) were distributed according convenience to form Experimental and Control groups.

Stage two: Cognitive Behaviour Therapy for the Experimental Group:

CBT is a treatment approach that has empirically demonstrated effectiveness with a wide variety of disorders including high incidence disorders such as stress, depression and anxiety. CBT is a relatively brief, straightforward, and collaborative approach to psychotherapy, which includes multiple techniques, all

intended to facilitate changes in thinking, behavior and mood. CBT can be administered in three modules which are given below.

Module I: Thoughts (Sessions 1-4)

In the initial session of the module, the therapist established a good rapport with each member of the group. The major intension for this module was to disclose data about how our present thinking process impact our mood state. The first session built up the structure and reason for the consequent sessions. The first session began a dialogue on psychological well-being and coping strategies: what it is and how the participant experiences it. The therapist additionally exhibited the motivation behind the first module, which was to understand the significance of how our thinking process impact on our psychological well-being and coping abilities. The next three sessions worked with different types of thinking errors and dysfunctional thoughts associated with psychological well-being and coping skills. In each session, practices or activities are used to understand and identify thinking errors. The plan of the third session met the major goal of giving the participants with skills for expanding psychological well-being and improving the adaptive coping strategies. In which the participants were given activities to establish a good psychological well-being and adaptive coping strategies.

Module II: Activities (Sessions 5-8)

The real motivation behind this module was to enable the each participant to associate cooperation in charming exercises with good psychological well-being and coping. There was a talk on how the presence of low psychological well-being can constrain the interest in charming exercises and adaptive coping skills, which increases psychological well-being and adaptive coping strategies. During these sessions, wonderful pleasant exercises were characterized and obstacles for taking part in them were distinguished. This module also works with how learning to build up clear objectives which can positively help to increase psychological well-being and adaptive coping. The main purpose of this module was that the participant increase his/her control over his/her life and learn to identify alternatives that would allow him/her to have more freedom and choices.

Module III: Relationships (Sessions 9-12)

The sessions in this module presented the idea of how our interpersonal relationships negatively influence our well-being and coping abilities, which prompts diminish in psychological well-being and avoidant coping. Social support and how it encourages us to go against troublesome circumstances were discussed. The participant figured out how to distinguish and reinforce their social support networks. These sessions have been included with coordinated aspects from the past modules. The therapist together with the participant examined how our thinking process influence the exercises which they do, social support and interpersonal relationships that each participant takes part in. Activities were used to instruct assertive communication skills that would enable the each participant to build up healthy satisfying relationships, which can be influenced positively in expanding the psychological well-being and adaptive coping abilities. During the final session, an evaluation of the therapy experience was carried out with the participant to identify strengths and successes achieved during process of the therapeutic modules.

ANALYSIS OF RESULTS:

The pre- test data was analyzed to examine if the control and experimental groups were similar to each other. Independent t test revealed no significant difference between the control and experimental groups in Psychological well-being ($t = 1.067, p = 0.287$), problem focused coping ($t = 0.412; p = .681$), Emotion focused coping ($t = 0.656, p = 0.513$) and Avoidant focused coping ($t = 0.108, p = 0.915$).

The following section discussed about the post test analysis of Psychological well-being and Coping Strategies.

Table 1.1: Mean and SD scores of Post-test on Psychological Well-Being

Variable	Groups						
	Gender	Experimental Group		Control Group		Total	
		Mean	SD	Mean	SD	Mean	SD
Psychological Well-Being	Boys	22.6200	1.35360	11.8200	1.53450	17.2200	5.61488
	Girls	22.5400	1.26507	11.3000	1.65677	16.9200	5.83559
	Total	22.5800	1.30407	11.5600	1.61007	17.0700	5.71387

Table 1.1 shows the mean and standard deviation of post-test scores of psychological well-being. The mean score for the control group was 11.56 (SD =1.61) and that of the Experimental group was 22.58 (SD = 1.30). In the gender category (including both control and the experimental groups), the boys had a mean score of 17.22 (SD=5.61) and the girls had a mean score of 16.92 (SD=5.71).

Table 1.2: Results of Repeated measures ANOVA for Psychological Well-being scores in pre and post- test situations of adolescent students groups.

Source	Type III Sum of Squares	df	Mean Square	F	Significance
Intercept	82110.903	1	82110.903	418.933	.001**
GROUP	3175.323	1	3175.323	16.200	.001**
GENDER	2.103	1	2.103	.871	.352
GROUP* GENDER	.122	1	.122	.051	.822
Error	473.050	196	2.414		

** significant @ 0.01, *significant @ 0.05

Table 1.2 reveals that there is a significant difference between the control and experimental groups in their psychological well-being ($F_{(1, 116)}=16.200$, $p=.001$). On combining the data of experimental and control groups, no significant gender difference was found ($F_{(1, 116)}=.871$, $p=.352$). There is no significant interaction between the group and gender was also found ($F_{(1, 116)}=.051$, $p=.822$), indicating that gender has not affected the treatment outcome.

Table 2 Mean and SD scores of pre and post-test on avoidant focused coping strategy of Experimental and Control groups

Variable	Avoidant Focused Coping						
	Gender	N	Pre-test		Post-test		Change in the mean
			Mean	SD	Mean	SD	Mean
Experimental Group	Boys	50	63.76	14.91	33.06	4.96	30.7
	Girls	50	67.96	4.91	34.76	6.51	33.2
	Total	100	65.86	11.21	33.91	5.80	31.95
Control group	Boys	50	63.33	12.24	65.90	6.11	-.57
	Girls	50	67.96	8.86	66.06	6.38	1.9
	Total	100	65.65	10.85	65.98	6.20	-0.33
Total	Boys	100	63.55	13.56	49.48	17.45	14.07
	Girls	100	67.96	7.10	50.41	17.02	17.55
	Total	200	65.75	10.98	49.95	17.17	15.80

Table 2.1: Results of Repeated measures ANOVA for Problem Focused coping scores in pre and post- test situations of adolescent students groups.

Source	Type III Sum of Squares	df	Mean Square	F	Significance
Intercept	21888.600	1	21888.600	111.676	.001**
GROUP	5415.000	1	5415.000	27.627	.001**
GENDER	1.350	1	1.350	.006	.978
GROUP* GENDER	132.017	1	132.017	0.673	.381
Error	13592.033	196	69.347		

** significant @ 0.01, *significant @ 0.05

Table 2.1 reveals that there is a significant difference between the control and experimental groups in their Problem focused coping scores ($F_{(1, 196)}=27.627$, $p=.001$). On combining the data of experimental and control groups, no significant gender difference was found ($F_{(1, 196)}=.006$, $p=.978$). There is no significant interaction between the group and gender was also found ($F_{(1, 196)}= 0.673$, $p=.381$), indicating that gender has not affected the treatment outcome.

Table 2.2: Results of Repeated measures ANOVA for Emotion Focused Coping scores in pre and post- test situations of adolescent students groups.

Source	Type III Sum of Squares	df	Mean Square	F	Significance
Intercept	4498.004	1	4498.004	22.949	.001**
GROUP	2154.004	1	2154.004	10.99	.001**
GENDER	.104	1	.104	.0005	.999
GROUP* GENDER	367.537	1	367.537	1.875	.165
Error	11372.850	196	58.024		

** significant @ 0.01, *significant @ 0.05

Table 2.2 reveals that there is a significant difference between the control and experimental groups in their emotion focused coping ($F_{(1, 116)}=22.949$, $p=.001$). On combining the data of experimental and control groups, no significant gender difference was found ($F_{(1, 196)}=.0005$, $p=.352$). There is no significant interaction between the group and gender was also found ($F_{(1, 196)}= .051$, $p=.822$), indicating that gender has not affected the treatment outcome.

Table 2.3: Results of Repeated measures ANOVA for Avoidant Focused Coping scores in pre and post- test situations of adolescent students groups.

Source	Type III Sum of Squares	df	Mean Square	F	Significance
Intercept	14994.204	1	14994.204	76.501	.001**
GROUP	15633.204	1	15633.204	79.761	.001**
GENDER	182.004	1	182.004	0.93	.253
GROUP* GENDER	14.504	1	14.504	.074	.953
Error	9697.583	196	49.477		

** significant @ 0.01, *significant @ 0.05

Table 2.3 reveals that there is a significant difference between the control and experimental groups in their psychological well-being ($F_{(1, 196)}=79.761$, $p=.001$). On combining the data of experimental and control groups, no significant gender difference was found ($F_{(1, 196)}=0.93$, $p=.253$). There is no significant interaction

between the group and gender was also found ($F_{(1, 196)} = .074, p = .953$), indicating that gender has not affected the treatment outcome.

DISCUSSION:

The main objective of this study was to understand the impact of Cognitive Behavior Therapy (CBT) on psychological well-being and coping strategies among adolescent students. The findings of the study revealed that CBT was highly effective in increasing psychological well-being and enhancing adaptive coping strategies among adolescent students. The findings of this study revealed that experimental group after received CBT, they have shown high level of psychological well-being. This is because after CBT, the stressors which affect on psychological well-being gradually decreased, in turn which increased psychological well-being. When an adolescents suffering from stress, they might have low psychological well-being. They are less concentrated on pleasurable events or activities in their daily lives. This is due to different factors such as parental pressure, academic pressure from teachers, societal influence on activities they do, peer pressure or influence etc. When a person is stressed or depressed he/she is not able to focus on other pleasurable activities, personal hygiene and other societal aspects. Later it affects on the development of psychological well-being. The level of psychological well-being is gradually decreased when the distress is high. Wright et al. (2006) conducted a research and summarized that cognitive behavioral interventions can be highly useful in helping patients improve coping, social and problem-solving skills. Simos (2008) found that CBT aims at focusing on changing habitual responses and behaviours i.e. by developing new helpful behaviours and phasing out unhelpful habitual responses to problematic situations. CBT aims at decreasing maladaptive behaviours (avoidance, inactivity, denial) and improving adaptive coping skills (problem solving).

The findings of this study revealed that experimental group after received CBT, they are more focused on problem focused and emotion focused coping strategies which are more appropriate and healthy adaptive coping strategies to deal with the stressful situations. They are less concentrated on adapting avoidance coping strategy which is very unhealthy habit of dealing with the stressful situations. While control group of this study has been more focused on avoidance coping strategy compared to other coping strategies.

CONCLUSION:

In this present study it is concluded that the CBT has a positive impact on adolescent students and it has helped to enhance psychological well-being and adoptive coping. The main goal of this therapeutic approach was to facilitate insight, so that they would be able to control their thought, feelings and actions. Moreover, therapists and mental health professional need to develop treatment approaches like CBT and offer a sympathetic and non-judgmental space which would allow the adolescents to off load the negative thoughts and feelings and enhance their positive attitude towards their lives. CBT can also be used as preventive therapeutic technique in mental health and community settings to prevent psychological distress in the society.

LIMITATIONS OF THE STUDY:

The present study also has some of limitations. Such as,

- The main limitation in the present study was the length of the two questionnaires used before and after the intervention program as some of the subjects expressed that answering the questionnaires which took around a little more than one hour was a difficult job for them.
- Sometimes the ratings given by adolescents are inaccurate because some individuals overrate themselves, some underestimate themselves, and a few individuals accurately rate themselves.
- Basically for the present study, the selection of the sample was based on the willingness of the participants. It is possible that those who didn't participate in the study may have benefitted differently to CBT.

- Sample was chosen on the basis of high scores hence generalization of the results may not be applicable to milder forms of severity.
- Pre- test and post- test measures were assessed using the same questionnaires. The knowledge of the items in the test (gained during the pre- test) might have affected the responses during the post test. This however, is probably not significant in our study since the duration between the pre-test and post-test was quite large: around more than three months.

RECOMMENDATIONS FOR FURTHER RESEARCH:

- CBT intervention as a group therapy has been proved effective on adolescent issues. Adolescents spent a quality time in schools and they live in groups most of the time. Educators can think about including separate modules in their existing curriculum to address adolescent behavior and emotional issues.
- Heterogeneous sample can be taken for the intervention which helps in finding out whether the benefit of the intervention is due to some other factors.

Further studies on the effectiveness of CBT on the variety of psychological conditions, with different cultural, regional and socio-economic groups could help to generalize the findings of the present study.

REFERENCES

- Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-283.
- Endler, N.S., & Parker, J.D.A. (1999). *Coping Inventory for Stressful Situations*. Manual second edition, Multi-Health Systems.
- Josep Gustems-Carnicer & Caterina Calderón (2013), Coping strategies and psychological well-being among teacher education students: Coping and well-being in student, *European Journal of Psychology of Education*, Vol. 28, No. 4 (December 2013), pp. 1127-1140.
- Nicholls, A. R., Holt, N. L., Polman, R. C. J., & Bloomfield, J. (2006). Stressors, coping and coping effectiveness among professional Rugby Union players. *The Sport Psychologist*, 20, 314-329.
- Özen, Ö. (2005). *Ergenlerin Özneliyi Olus Düzeyleri*. Yüksek Lisans Tezi, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Ryff, C. D., & Singer, B. H. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 65, 14-23.
- Syed, M. & Seiffge-Krenke, I. (2013). Personality development from adolescence to emerging adulthood: Linking trajectories of ego development to the family context and identity formation. *Journal of Personality and Social Psychology*, 104(2), 371-384. <http://psycnet.apa.org/doi/10.1037/a0030070>
- Wright, J.H., Basco, M.R., & Thase, M.E. (2006). *Learning Cognitive-Behavior Therapy: An Illustrated Guide*. Washington, D.C., American Psychiatric Press.