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Effectiveness of Life Skill Intervention to Enhance Resilience for Semi Urban and Rural College Students

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Abstract—The aim of the study was to enhance the resilience levels of rural and suburban professional college students living in hostel by providing life skills training. Students were assessed initially for resilience and depression. A pre- post experimental group control group research design was chosen for the study. Both boys and girls were in the first year with lower levels of resilience and higher levels of depression. They were selected criterion sample for the study. sample of 50 students was assigned to experimental group and control group. They were trained in life skills for a period of two weeks in ten sessions. The data was statistically treated using SPSS version 11.5. Paired t tests revealed significant difference between the experimental group and control group. The levels of resilience improved significantly and the level of depression has lowered significantly for the experimental group. However, the control group also showed an improvement in the level of resilience but not in the level of depression. The experimental group displayed higher levels of resilience as compared to the control group implying that the intervention was effective.

Keywords: Resilience, depression, life skills intervention, students.

INTRODUCTION

Late adolescents represent a unique period of transition, which is moving from adolescent to adulthood. They are usually considered to be a healthy group but many psychological problems may also seen during this time. The late adolescents have the higher risks of clinical depression, bipolar disorder, anxiety disorders, eating disorders and suicide. This is the age when they have been found to develop high-risk behaviors as noted by Papalia, Olds and Feldman, (2004).

The norm is seen as students go, after school, and enroll in college for higher studies to pursue different academic streams.. Students for the sake of better college and academic facilities are seen to travel further from where they are currently residing to cities or different states for education. Therefore those who enroll in these courses choose to seek accomodation in hostels nearby by the college. Students hailing from rural and semi urban areas are not used to the multi cultural environments and are faced with challenging situations. The separation from home and the stress resulting from managing the sudden changes results in these hostelites experiencing grief and emotional distress like homesickness, loneliness and depression (Archer, Ireland Amos Broad and Querid, 1998).

Paplia *et. al.* (2004) states that adolescence is a stage that is highly prone to depression. To be able to deal with these changes, yet maintain composure under threat and bounce back from traumatic events the student has to be a resilient.

A comparative study was conducted by Wong, *et al.* (2009), on resilience level between WHO health promoting schools and other schools among a Chinese population. A cross-sectional survey was conducted for students aged 12 years. Results revealed that the HSA scheme under WHO has the potential to exert positive changes in students and teachers and the concept of HPS is effective in building resilience among major school stakeholders.

In an earlier study by Wong, *et al.* (2008), examined the impact of a newly designed resilience-enhancing programme on parent-and teacher-perceived resilience environment among Health Promoting Schools in Hong Kong. This study demonstrates the positive synergistic effect of a newly designed resilience-enhancing intervention programme, building on the concept of HPS in schools among secondary teachers in Hong Kong.

Steinhardt and Dolbier (2008), assessed a resilience Intervention to enhance coping strategies and protective factors and decrease symptomatology. Analyses indicated that the experimental group had significantly higher resilience scores, more effective coping strategies (i.e., higher problem solving, lower avoidant), higher scores on protective factors (i.e., positive affect, self-esteem, self-leadership), and lower scores on symptomatology (i.e., depressive symptoms, negative affect, perceived stress) post-intervention than did the wait-list control group. These findings indicate that this resilience program may be useful as a stress-management and stress-prevention intervention for college students.

Thus, above researches demonstrates that intervention can help enhance resilience among college students. Life skills intervention can empower adolescents to translate knowledge, attitudes and values into healthy behaviour, and acquire the ability to reduce special health risks and adopt healthy behaviour that improve their lives in general such as planning ahead, career planning, decision-making, and forming positive relationships.

METHODS

AIM

The aim of the study is to assess the resilience and depression among first year engineering college hosteliers and enhance their resilience through Life Skills Intervention (LSI).

RESEARCH DESIGN

The research design is experimental research design, the pre-test post-test equivalent groups research design has been adopted for this study (Best and Kahn, 2004).

OPERATIONAL DEFINITIONS

Resilience

Means an individual's ability to overcome adversity and continue his or her normal development. It is the ability to successfully cope with change or misfortune.

According to Ungar (2005), "Resilience is both an individual's capacity to navigate to health resources and a condition of the individual's family, community and culture to provide those resources in culturally meaningful ways". In this sense, resilience is the result of both successful navigation to resources and negotiation for resources to be provided in meaningful ways.

Life Skills Intervention

UNICEF, UNESCO and WHO list the ten core life skill strategies and techniques as:

1. Problem solving,
2. Critical thinking,
3. Effective communication skills,
4. Decision-making,
5. Creative thinking,
6. Interpersonal relationship skills,

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7. Self-awareness building skills,
8. Empathy, and
9. Coping with stress and
10. Emotions.

Self-awareness, self-esteem and self-confidence are essential tools for understanding one's strengths and weaknesses. The World Health Organization has defined life skills as, *"the abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life*". UNICEF defines life skills as "a behaviour change or behaviour development approach designed to address a balance of three areas:

1. Knowledge,
2. Attitude and
3. Skills.

Depression

Is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings and physical well-being. Depressed people may feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable, or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, or problems in concentrating, remembering details or making decisions; and may contemplate or attempt suicide. Insomnia, excessive sleeping, fatigue, loss of energy, or aches, pains or digestive problems that are resistant to treatment may be present.

SAMPLE

For baseline assessment, rural and semi urban college students (n=62) who resided in hostels were screened for lower levels of resilience selected using criterion sampling taking those who below120 on resilience scale There were 62 students who scored below 120 who were purposively chosen. They were randomly assigned to experimental group and control group. Thus there were 31 students in the experimental group and 31 students in the control group.

TOOLS USED FOR THE STUDY

THE TAMIL VERSION OF RESILIENCE SCALE

This tool was validated for adolescents by Lakshmanan. K and Veerapandian (2009) to assess the level of resilience of the students. The English version was originally developed by Gail Wagnild and Heather Young in the year 1987 and was published in the year 1993 based on a qualitative study and review. It measures the degree of individual resilience, which is considered a positive personality characteristic that enhances individual adaptation. Resilience is indicated by "the total score obtained on the resilience scale" higher the score, higher the resilience. The content validity of the Tamil translation was established by back translation method and its test-retest reliability is 0.7. It consists of 25 items rated on a seven point scale. In the tool, the response options were Strongly disagree–1, Disagree most of the time–2, Disagree more than half of the time–3, Neither agree nor disagree–4, Agree more than half of the time–5, Agree most of the time–6, Strongly agree–7. Scores range from 25 to 175.

TAMIL VERSION OF THE MAJOR DEPRESSION INVENTORY (MDI)

Developed for the World Health Organization; this instrument was constructed by a team led by Per Bech, a psychiatrist based at Frederiksberg General Hospital in Denmark. The Major Depression Inventory (MDI) is a new, brief, self-report measure for depression based on the DSM-system, which allows clinicians to assess the presence of a depressive disorder according to the DSM-IV, but also to

assess the severity of the depressive symptoms. The reliability of the MDI, as indicated with Crohnbach's alpha was a satisfactory 0.89. (2001). For Tamil translation, Inter rater reliability is 0.87. MDI had an adequate internal validity in being a one-dimensional scale (the total score an appropriate or sufficient statistic). The external validity of the MDI was also confirmed as the total score of the MDI correlated significantly with the HAM-D (Pearson's coefficient 0.86, P < or = 0.01, Spearman 0.80, P < or = 0.01). for Tamil translation, the face and content validity was established by administering individually. The MDI score ranges from 10 to 60, since each of the 10 items can be scored from 1 (at no time) to 6 (all the time) the. The item with a higher score is included between items 8 & 9 and 11 & 12. Higher the score lower the level of depression.

INTERVENTION MODULE

The intervention module was developed by the counselors after considering the need and type of life skills. Activities and exercises which were age appropriate and content validated by counselors were included in the study. Modules were developed and adopted in the intervention for the present study The intervention module has been presented in table 1.

Table 1: Shows the Life Skills and Detailed Intervention Activities

Session	Life Skill/ Topic	Content
1	Introduction & Self Awareness	Ice Breaker, Introduction to Life Skills Interventions and Ground Rules, Johari Window
2	Goal Setting	SMARTER Goals and Career Planning
3	Communication	Verbal Communication (Transactional Analysis or 4 Types of Communication Styles) Non-Verbal Communication (Gestures, Facial Expression, Postures and Eye Contact, Vocal etc.)
4	Interpersonal Relationship Skills	Team Building and Leadership, Empathy, Identifying emotions and Assertiveness.
5	Coping with stress	Time Management, ABC model of stress, Changing negative thought patterns
6	Coping with emotions	Emotional Intelligence, Anger Management, Depression and Anxiety
7	Creative Thinking	Components of Creativity: Fluency, Originality or novelty, Elaboration, Flexibility and Problem Sensitivity/Brain Storming
8	Critical Thinking	Perceptions, Beliefs, Judgments, Cognitive Errors
9	Decision Making	Cost Benefit Analysis/Plus Minus Interesting, Brainstorming,
10	Problem Solving	Gerald Eagan's Skilled Helper Model of Problem Management
11	Conclusion, Post Test and Feedback	Written and Oral Feedback

The experimental group was met on week days for two hours for a period of three weeks.. The intervention was conducted during the evening after their regular classes. The data screened on resilience and depression were used as the pre test scores and the post test. There were 7 drop outs in the experimental group and 5 dropouts in the control group during the intervention.. The posttest scores of the experimental group was N=26 and in the control group N=26 based on the resilience and depression scale. The data was statistically analyzed using SPSS version 11.5. Mean, SD, SE and 't' test were calculated for inference.

RESULTS AND DISCUSSION

Both the experimental group and the control group were tested for homogeneity in resilience and depression with respect to pre test scores. An insignificant t value indicated that the experimental group and the control group were homogeneous in resilience and depression before the intervention.

The pre test scores and the post-test scores of both the experimental group as well as the control group were compared and t test results are represented in Table 1 and 2.

There was a significant difference observed in the resilience levels of the students in the experimental group before the intervention (M=110.38, SD = 21.52) and after the intervention (M=139.13, SD=12.11) t (23) = 7.1, p<0.01. The mean resilience scores were higher in the post-test scores. This implies that the resilience level has improved after the intervention.

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The depression levels of the experimental group significantly differed for the students before the intervention (M=43.08, SD=9.36) and after the intervention (M=52.83, SD=4.01) t (23) = 6.13, p<0.01. The higher scores in the depression scale after the intervention indicated that depression levels has reduced for the experimental group after the intervention.

The control group showed that there was a significant difference in the resilience level for control group before the intervention (M=103.58, SD = 20.72) and after the intervention (M=114.08, SD=20.86) t (25) = 3.27, p<0.01. The resilience scores were observed as higher in the post-test. This implied that the resilience levels could build up even without the intervention. However it is still lower than the change that occurred in the experimental group; which could be because of exposure to changing conditions, life experiences and interaction with peers and maybe due to developmental maturation.

No significant differences were observed in the depression levels of the control group in the pre test (M=44.27, SD=8.82) and the post test (M=46.54, SD=6.11) t(25)= 1.50, p<0.01. The scores in the depression scale indicated that depression level did not significantly reduce for the control group.

When the experimental group and the control group were compared the before the intervention; no significant difference were observed between the experimental group (M=110.38, SD = 21.52) and control group (M=103.58, SD = 20.72) in their levels of resilience t(48) = 1.14, p< 0.05.

The level of depression also has not significantly differed between the experimental group (M=43.08, SD=9.36) and the control group (M=44.27, SD=8.82) before the intervention t (48) = 0.46, p<0.05.

Even though the control group showed increased levels of resilience there was a significant difference observed between the experimental group (M=139.13, SD=12.11) and the control group (M=114.08, SD=20.86) in the level of resilience t(48)=5.14, p<0.0. in the post test. The experimental group displayed higher levels of resilience as compared to the control group in the post-test; which indicated the effectiveness of the intervention.

The experimental group (M=52.83, SD=4.01) and the control group (M=46.54, SD=6.11) differed significantly in their level of depression; t (48) = 4.27, p<0.01. in the post test. The depression level of the experimental group has been found to be lower than the control group in the post test. This implied that the intervention significant in reducing the depression levels of the experimental group.

The results imply that life skills intervention is significantly effective in enhancing the resilience levels of the students. The depression levels significantly reduced after the intervention for the experimental group.

Such interventions have been found significantly effective in many countries as well (Wong et al 2008, 2009). When students are at the threshold of adulthood; such skills may enhance their resilience and equip them with more confidence to deal with newer challenges in the next stage i. e. the young adulthood stage of their lives.

The control group shows a significant improvement in their level of resilience but not in their level of depression. The role of life experiences in the building up of resilience cannot be ignored as observed from the results. Resilience may have enhanced for the control group due to acculturation and peer influence and compulsion to adapt to the new environment. However the level of resilience in the control group is seen as significantly low compared to experimental group. This implies that the intervention has facilitated in the building resilience at better rate among the students.

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Table 2: Shows N, Mean, SD, SE, df, t Ratio and Level of Significant Values for the Experimental Group and Control Group before and after the Intervention

N=50 Df=48	Type of group	Mean	Std. Deviation	Std. Error Mean	t-ratio	Sig
Resilience Pre test	Experimental group	110.38	21.52	4.39	1.14	.26NS
	Control group	103.58	20.72	4.06		
Depression Pre test	Experimental group	43.08	9.36	1.91	0.46	.65NS
	Control group	44.27	8.82	1.73		
Resilience post test	Experimental group	139.13	12.11	2.47	5.14	.00**
	Control group	114.08	20.86	4.09		
Depression post test	Experimental group	52.83	4.01	0.82	4.27	.00**
	Control group	46.54	6.11	1.2		

Table 3: Shows Mean, SD, SE, N, df, t Ratio and Level of Significance Values for Pretest Scores and Post Test Scores for Experimental Group and Control Group

N		MEAN N= 24	N	SD	SE	T ratio	Sig
Pair 1 df=23 Experimental Group Resilience Scores	Pre test	110.38	24	21.52	4.39	7.10	.000**
	Post test	139.13	24	12.11	2.47		
Pair 2 df=23 Experimental Group Depression Scores	Pre test	43.08	24	9.36	1.91	6.13	.000**
	Post test	52.83	24	4.01	0.82		
Pair 3 df=25 Resilience scores Control Group	Pre test	103.58	26	20.72	4.06	3.27	.003**
	Post test	114.08	26	20.86	4.09		
Pair 4 df=25 Depression Scores Control Group	Pre test	44.27	26	8.82	1.73	1.50	.146NS
	Post test	46.54	26	6.11	1.2		

CONCLUSION

1. The hostel students have been found to be experiencing high levels of depression during the initial days of college.
2. The resilience level is lower for hostel students coming from semi urban and rural background.
3. Life skills intervention can effectively reduce depression and increase resilience among students.
4. Even though resilience can improve among students without intervention; the process is better with intervention.
5. Intervention is necessary for first year college students especially from rural and urban background to be able to cope up with the challenges at the college level.

FUTURE DIRECTIONS

1. The retention effect of the intervention needs to be studied with a repeated post-test which could not be conducted due to exams and holidays.
2. Gender differences if studied can indicate if the interventions need to be made gender specific.
3. Life skills training is essential and should be made mandatory for students to overcome depression and enhance their resilience levels at the entry level of college.

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