

Effectiveness of an Instructional Module for Enhancing Life Skills among Higher Secondary School Students in Kerala

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Abstract

Adolescence is a sensitive developmental stage marked by cognitive, emotional, and social development, and adolescents experience numerous issues that affect their academic achievement and overall well-being. The skills that can help build resilience and flexibility in adolescents are life skills (communication, decision-making, problem-solving, empathy, and stress management). The proposed study was designed to develop and test an instructional module to enhance the life skills of higher secondary school students in Kerala. A quasi-experimental research design was used, involving 120 students from four higher secondary schools; 60 were in the experimental group and 60 in the control group. The experimental group underwent a six-week intervention that included case-study-based interaction sessions, role-plays, group discussions, and situational analysis. The life skills assessment scale assessed life skills competencies before and after the intervention. The data were analyzed using descriptive statistics, independent *t*-tests, and ANOVA, which demonstrated the absence of significant differences between groups at baseline, thereby establishing initial equivalence. Post-intervention outcomes showed that all life skills domains were significantly improved in the experimental group compared to the control group. The advantages for both male and female students were equal, and the gains across modules were the same across all skills. The results indicate that culturally appropriate life skills programs have the potential to effectively improve adolescents' personal, social, and emotional skills, underscoring the need to incorporate such programs into the school curriculum.

Keywords: life skills, adolescents, secondary school students, instructional package, decision-making, problem-solving, empathy, stress management

Introduction

Adolescence is a transformative stage marked by cognitive, emotional, and social changes. In the process, students encounter numerous issues, such as making informed choices, dealing with stress, communicating with peers, and communicating effectively. These issues may impact not only academic performance but also personal and social well-being. Adaptive skills and good habits are also life skills, and all of these help adolescents manage these demands and become more resilient in their day-to-day lives (UNICEF, 2025; WHO, 2017).

In Kerala, students' average secondary school performance is usually high, thanks to the state's high literacy rate and robust educational infrastructure. Despite this academic achievement, many adolescents have difficulty controlling emotions, solving problems, and communicating with others. These skills can be enhanced through purposeful life skills training to help students address their personal and social problems. For example, Anand et al. (2014) found that physical activity and adolescents' self-control improved following training in life skills. Similarly, Ghasemian and Venkatesh (2017) reported that adolescents' autonomy increased after training. Moreover, Kaur and Joshith (2021) found that life skills programs enhanced emotion regulation and interpersonal communication among school students.

Although the advantages of life skills programs have been identified worldwide, little can be done to assess the teaching practices designed to target secondary school pupils in Kerala. The current literature on the matter focuses only on general training or ad hoc workshops, not on a formal, culturally relevant curriculum. The teaching package that can be developed and evaluated with reference to the local context can fill this gap. It may enhance students' communication, decision-making, problem-solving, empathy, and stress management abilities (Tagat et al., 2025). Educators and policymakers can support adolescents' holistic development by providing evidence-based training. They can also enhance resilience, interpersonal skills, and adaptive behaviors at school.

Review of the Related Literature

Tagat et al. (2025) assessed the Childhood to Livelihood (C2L) life skills program used by the Magic Bus India Foundation in India. The intervention enhanced socio-emotional development (self-efficacy, resilience, gender attitudes) and demonstrated positive short- and long-term effects on school attendance and setting future goals.

Surendran et al. (2023) conducted a mixed-methods study examining how life skills education affects socio-emotional functioning among high school students in urban Puducherry, using an experimental design. They observed that life skills training significantly benefits socio-emotional functioning and that such programs are required in the long term before substantial changes

can be observed. Difference-in-differences analysis revealed no significant improvements in self-esteem, self-efficacy, or overall adjustment attributable to the intervention.

Sukumar et al. (2022) examined the Life Skills Training and Counseling Program in Karnataka. The study included 2669 participants from 48 universities across 30 districts of Karnataka. During the training program, pre- and post-training assessments of life skills were administered using a semi-structured questionnaire. They reported significant improvements in life skills among adolescents and young adults who participated in the program.

Kaur and Joshit (2021) examined by a quasi-experimental method the impact of life skills training on 970 secondary school students at 11 districts of Punjab in terms of depression, anxiety, and stress. After training, they observed a notable improvement in all three aspects of the students. These findings suggest that life skills programmes hold promise as an effective mental health promotion strategy for adolescents and could be integrated into the mainstream school curriculum to help young people better cope with daily stressors.

Narasimharaju (2020) investigated the impact of a training program on life skills in high school students. Researchers selected 200 (100 girls and 100 boys) from 450 high school students from rural and urban areas of Tiptur, Karnataka. The study reveals significant gains in students' general well-being, with female students gaining more than male students.

Tiwari et al. (2020) introduced a six-month life skills health education program for 274 adolescents in South India across urban and rural schools. They discovered that the participants had much improvement in critical thinking, self-awareness, creative thinking, and interpersonal skills. The findings demonstrate that a structured life skill education module, implemented through participatory methods, effectively enhances essential life skills among adolescents, supporting its integration into the standard school curriculum to foster holistic personality development.

Moulier et al. (2019) tested the Mission Papillagou prevention program based on life skills in France. The test was administered to 10- to 15-year-olds (520 students). The study reported increases in self-esteem and well-being, and a decrease in risky behavior, including bullying and rumor spreading. This study suggests that life-skills-based risk prevention programs are effective.

Ghasemian and Venkatesh (2017) conducted a comparative study of adolescents who have undergone life skills training and those who have not. Researchers found that when trained high school students were tested, they showed tremendous improvement in behavioral, emotional, and attitudinal domains. This enhanced not only academics but also life skills.

Anand et al. (2014) examined the effectiveness of a life skills training program to support physical activity behavior among high school students in Delhi. The students in the trained group engaged much more in moderate and vigorous physical activity, stretching, and strengthening exercises than the control group over a period of three months.

Srikala and Kishore (2010) compared the National Institute of Mental Health and Neuro Sciences (NIMHANS) schools-based life skills program with 605 adolescents. Results revealed that adolescents in the life skill education program demonstrated significantly higher self-esteem, better perceived coping abilities, improved overall adjustment—particularly within the school environment and with teachers—and enhanced prosocial behavior compared to their peers in the control group. However, no significant differences were found between the two groups regarding psychopathology or adjustment at home and with peers.

Yadav and Iqbal (2009) evaluated the effect of life skills training on self-esteem, coping skills, and empathy among 60 students (30 girls and 30 boys) from Hans Raj Model School, Punjabi Bagh, New Delhi. Self-esteem, emotional coping, academic coping, social coping, and empathy had great improvement at the end of the training. Nonetheless, the social problem-solving skills did not differ significantly.

Objectives

1. To develop training materials for enhancing life skills among high school students.
2. To assess the current level of life skills among the selected students.

3. To evaluate the effectiveness of the training materials in improving life skills.
4. To compare the life skills improvement between the experimental and control groups.
5. To investigate the impact of gender on life skills development.

Hypotheses

1. There was no significant difference in life skills between the experimental and control groups prior to the intervention.
2. There was no significant difference in life skills improvement between the experimental and control groups.
3. Gender does not have a significant effect on students' improvement in life skills following the intervention.

Methodology

Design

The study employed a quasi-experimental design to evaluate the effectiveness of a life skills development training program among high school students. Two groups were considered: the experimental group, which participated in the intervention, and the control group, which followed the regular curriculum and did not receive an extra life skills training course.

Participants

120 students from 4 schools in Kerala participated in this study. The participants' ages ranged from 13 to 15 ($M = 14.02$, $SD = 0.68$). Participants were selected using stratified random sampling to ensure equal representation of both urban and rural schools. The experimental group had 60 students, and the control group had 60; the number of boys and girls in each group was approximately equal.

Instruments

A life skills assessment scale was used to gather data, targeting young adolescents. This tool assessed core life skills in five areas: communication, decision-making, problem-solving, empathy, and stress management. The scale consisted of 25 statements on a 5-point Likert-type response scale (1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*), with participants rating the frequency and skillfulness of each skill. The tool's reliability was assessed in a pilot study conducted before the main intervention, and Cronbach's alpha was 0.88, indicating high internal consistency. This scale is highly standardized, which guarantees that it is a valid and reliable measure of the life skills of the young adolescent population.

Procedure

The intervention took place over six weeks. Both the experimental and the control groups were administered the life skills assessment scale during the baseline assessment to assess their initial skill levels. The experimental group was then subjected to the training program, comprising 12 sessions lasting 45 minutes each. The group that was not subject to any intervention remained in their normal academic schedules. Both groups were assessed at the end of the intervention period regarding changes in life skills using a post-intervention assessment.

The interactive and engaging activities in the training program included case studies, situational assessments, group discussions, and role-playing exercises. These sessions were structured to help them acquire fundamental life skills, including emotional management, effective communication, problem-solving, decision-making, empathy, and stress management. The content was culturally oriented to represent the experiences and the challenges of high school students in Kerala.

Data Analysis

Descriptive statistics, independent-samples *t*-tests, and ANOVA were used to analyze data collected during the pre-test and post-test. Those analyses revealed the importance of differences between the experimental and control groups, as well as the possible impact of gender and school location on the intervention's effectiveness.

Training Method

Table 1

Content, Objectives, and Activities of the Life Skills Training Program

Section	Objective	Activity	Time
Communication Skills	Enhancing verbal and non-verbal communication skills	Role-playing, group discussions	3 sessions
Decision Making and Problem Solving	Increasing the ability to make well-informed and sound decisions	Group problem-solving activities, real-life simulations	3 sessions
Empathy and Social Awareness	Understanding and considering others' feelings	Group exercises, self-assessment notes	3 sessions
Stress Management	Providing ways to manage stress	Meditation exercises, relaxation techniques	3 sessions

Limitations of the Study

1. The study was conducted in only four higher secondary schools in Kerala.
2. The training program lasted only six weeks.
3. The primary data collection tool was a self-report Likert-type scale.
4. The research focused exclusively on higher secondary school students aged 13 to 15.

Results

Table 2

Pre-Test Comparison Between Experimental and Control Groups

Group	n	M	SD	t	p
Experimental group	60	45.60	5.30	0.56	NS
Control group	60	45.10	5.50		

Note. $p < .05$.

Table 3

Post-Test Comparison Between Experimental and Control Groups

Group	n	M	SD	t	p
Experimental group	60	72.40	6.10	16.30	< .001
Control group	60	46.30	5.70		

Note. $p < .05$.

Table 4

Module-Wise Improvement in the Experimental Group

Module	M		Improvement (%)
	Pre-test	Post-test	
Communication	46.20	73.40	27.20
Decision-making	44.80	70.50	25.70
Problem-solving	45.50	73.40	27.90
Empathy	45.00	70.30	25.30
Stress management	45.80	71.90	26.10

Note. $N = 60$ (each group).

Table 5

Pre-Test and Post-Test Comparison by Gender (Experimental Group)

Gender	n	M (pre-test)	M (post-test)	t	p
Male	30	45.40	72.10	15.80	< .001
Female	30	45.80	72.70	16.10	

Note. $N = 60$. $p < .05$.

Table 6

Effect Size and Significance for Experimental Group Pre-Test vs Post-Test

Measurement	M	SD	t-value	df	p	d
Pre-test	45.60	5.30	16.30	59	< .001	4.69
Post-test	72.40	6.10				

Note. $N = 60$ for both measurements. $p < .05$. d indicates Cohen's d effect size; Cohen's $d = 4.69$, indicating an extremely large effect size.

The study findings show that the participants in the experimental group experienced a significant enhancement in their life skills following the intervention. Using the first comparison, the study found no significant differences between the experimental and control groups, confirming that the two groups started at equal levels. The students in the experimental group responded much better to all the skills assessed after the intervention than the control group did, including communication, decision-making, problem-solving, empathy, and stress management. The block-wise analysis revealed improvements across all life skills. The intervention greatly improved students' life skills. Gender analysis showed that the program was equally effective for both male and female students, indicating that gender was not a factor in the intervention's success or failure.

Discussion

The findings of the current study indicate that a life-skills-based intervention was imperative for improving the skills of high school students in Kerala. The significant differences in communication, decision-making, problem-solving, empathy, and stress management between the experimental and control groups demonstrate that the program is effective. This is consistent with the prior research, including the study conducted by Srikala and Kishore (2010) that revealed the elevated levels of self-confidence and coping skills in adolescents, and the one by Kaur and Joshit (2021) demonstrating the decreased level of depression, anxiety, and stress following the training in life skills. In the same manner, socio-emotional functioning and autonomy have been observed to improve (Ghasemian and Venkatesh, 2017; Narasimharaju, 2020; Tagat et al., 2025). This points to the efficacy of life skills programs in alternative settings.

Moreover, this research found that the intervention was equally effective among male and female students, indicating that life skills training program can be applied universally. The improvements by module show that all life skills have increased significantly, underscoring the need for structured, culturally relevant instructional programs. These results are consistent with international studies that have identified a beneficial impact of life skills training on adolescents' well-being, self-confidence, and adaptive behavior (Moulier et al., 2019; Sukumar et al., 2022).

Conclusion

The life skills training program introduced in this study made substantial improvements in the personal, social, and emotional skills of higher secondary school students. There were great enhancements in communication, decision-making, problem-solving, empathy, and effective stress management. This proves that these initiatives have the potential to promote holistic growth among adolescents.

The study results indicate that life skills programs integrated into schools will equip students with better knowledge and skills to cope with problems encountered in academic and social life. Further studies may focus on the outcomes of such programs over an extended period, their use with contemporary digital technologies, and their usefulness for students with diverse learning needs. Moreover, life skills activities have a significant impact on adolescents' individual, social, and emotional maturity.

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