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# Role of life-skills and attitude toward alcohol abuse in predicting academic achievement of school students

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## Abstract:

**BACKGROUND:** Life skills are crucial for young adults to lead a successful, satisfying, and productive life. There is enough evidence suggesting a positive relationship between life skills and academic performance. Substance abuse among adolescents is a common problem that often leads to academic disorientation and delinquent behavior. This study aimed to determine whether life skills and attitudes toward alcohol abuse predicted school students' academic achievement.

**MATERIAL AND METHOD:** The participants ( $N = 726$ ) enrolled in senior secondary schools of Sikkim, a north-eastern state of India, constituted the population of the present study. Data were collected using the "Life Skills Assessment Scale" developed by Subashree and Nair (2014), and the "Attitude towards Alcohol Abuse Scale" developed by the investigators.

**RESULT:** Life skills and attitude toward alcohol abuse significantly predict students' academic achievement. 15.3% variance in academic achievements of the students was explained by life skills and attitude toward alcohol abuse. Further, the  $t$ -test result reflects that both the variables had significant predictive power to predict students' academic achievement.

**CONCLUSION:** The finding shows that there was a significant relationship between academic achievement and life skills and attitude toward alcohol abuse of school students. Life skills and attitude toward alcohol abuse predicted 15.3% of the variance in academic achievement.

## Keywords:

Academic achievement, adolescents alcohol abuse, critical thinking, creativity, empathy

## Introduction

### Life skills

The highly competitive world that we are living in presently and the swift decline of values and norms have heightened the stress among adolescents resulting in multiple mental health issues such as depression, anxiety, anger, conflict in interpersonal relationships, rejections, failure, and loneliness.<sup>[1,2]</sup> Life skill is considered an important resource for developing psychosocial, emotional, cognitive, and other behavioral skills to deal with everyday life challenges in an effective and constructive manner.<sup>[3,4]</sup> Life

skills have been identified as an essential resource for developing psychosocial, emotional, cognitive, behavioral, and resilience skills to negotiate everyday challenges and productive involvement in the community.<sup>[3-6]</sup> Specific life skills help young people in coping with the challenges and becoming productive members of society.<sup>[7-9]</sup>

Adolescents with poor life skills are more likely to fall victim resulting in a greater risk to use substances to cope with their situation, which includes stress, anxiety, anger, and failure. Studies have proved that students who possessed specific life skills had better mental health and well-being.<sup>[8,9]</sup>

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### Attitude toward alcohol abuse

Senior secondary students are growing adolescents, who are characterized by greater emotional reactivity and often make risky choices than children or adults at times.<sup>[10]</sup> Attitude plays a very important role in shaping the behavior of young minds, especially related to alcohol abuse. Adolescents, who have favorable attitudes toward tobacco, alcohol, or drugs are associated with an increased risk of using substances.<sup>[11]</sup> Theories related to alcohol abuse have highlighted that the causes sought in the personal characteristics of users are not only the reason but also in the social framework in which they interrelate and the role models they follow.<sup>[12]</sup> Their circle of friends who frequently use alcohol<sup>[13]</sup> is one of the major reasons along with their family using alcohol on a regular basis,<sup>[12]</sup> which contributes to the development of risk factors, which results in greater intention to consume alcohol at a young age. Adolescents, who use alcohol, display poor performance in academics, disturbances in social and emotional development that often lead to high-risk behavior, and impairment in psychosocial development.<sup>[14]</sup>

There is a growing demand to educate adolescents with life skills to help them deal with their day-to-day life challenges and transition into adulthood with informed healthy choices, most of the studies focus on studying the effectiveness of life skill interventions for cognitive, psychological, and other aspects of individuals.<sup>[15-17]</sup>

The use of tobacco, alcohol, and other substances around the world is one of the major problems, which have affected many children and adolescents.<sup>[18]</sup> The World Health Organization (WHO) report<sup>[19]</sup> estimates that 26.5% of the age group between 15 and 19 years old are current drinkers, which amounts to 155 million adolescents worldwide. It is more common among males and young adults, becoming less common in middle and old age. In 2016, 3 million deaths were reported due to harmful use of alcohol amounting to 5.3% of all deaths, and 5.1%, which is 132.6 million, was disability-adjusted life years (DALYs), are believed to be due to alcohol worldwide. NFHS-4 in 2015–16<sup>[20]</sup> reveals that 51.2% of males and 23% of females in the age group of 15–49 years consumed alcohol in Sikkim. Along with alcohol consumption, drug abuse is also on the rise and is one of the biggest emerging problems in Sikkim. A study of substance abusers conducted<sup>[21]</sup> in the emergency services wing of a tertiary hospital in Sikkim shows that the age range of the substance-abusing population was 19 to 68 years with an average age of 36 years out of the 54 patients. It was also found that 77% of the population admitted was related to alcohol. At the same time, 57% of patients were the cases of alcohol withdrawal for attending the emergency ward. Alcohol

and drug abuse are important public health concerns for the state to tackle.<sup>[22]</sup>

### Academic achievement

Despite the fact that schools facilitate equal classroom instruction to all students, a wide range of differences is observed in their performance outcomes because of several related factors.<sup>[23,24]</sup> Number of other psychological factors such as self-concept,<sup>[25]</sup> academic motivation,<sup>[26]</sup> emotional intelligence,<sup>[27]</sup> and academic resilience<sup>[28]</sup> had a significant association with the academic achievement of students. Efforts have been made to predict the academic achievement of students and students' attitudes and behavior were found to be associated<sup>[29,30]</sup> and significantly predicting<sup>[31]</sup> their academic achievement. In continuation to previous efforts, the present study attempted to study the prediction of students' academic achievement by life skills and their attitude toward alcohol abuse.

### Objectives of the study

The purpose of the present study was to determine if there is a significant relationship between subscales of life skill and academic achievement, subscales of attitude toward alcohol abuse and academic achievement. The study also aimed to predict the variance of students' academic achievement caused by life skills and attitudes toward alcohol abuse.

## Materials and Methods

### Study design and setting

The present study was a predictive study as a prediction study was used as a different design in correlation research and examined the correlations between variables.<sup>[32]</sup> Prediction studies show how a variable is predicted by another variable using correlation coefficients.<sup>[33]</sup>

### Study participants and sampling

A total no of 726 class 11 students ( $N = 726$  with mean age of 17.5 years, and standard deviation [SD] = 1.67) were selected from the schools of Sikkim, India, using a stratified random sampling technique. Out of total participants, 363 were male (mean age = 17.3 years, SD = 1.66), and 363 were female (mean age = 17.7 years, SD = 1.66).

### Data collection tools and technique

Life Skills Assessment Scale (2014) constructed by Dr. R. Subashree and Dr. A. Radhakrishnan Nair was used to assess the life skills of students. The content validity of the scale was established and scale reliability was 0.82. Attitude towards Alcohol Abuse Scale (ATTAS) was constructed and standardized by the researcher to assess students' attitudes. The content validity of the

scale was established and the split-half reliability of the scale was 0.77. The final exam score of class 11 students was collected and considered as academic achievement of students.

Data were collected by administering the "Life Skill Assessment Scale," the "Attitude towards Alcohol Abuse Scale," and the "Personal Information Form" face-to-face to the participants. Data were also collected from senior secondary students from schools in Sikkim. Multiple regressions were used to predict the relationship between two or more predictor variables and a criterion variable.<sup>[34]</sup> Therefore, multiple regression analysis was used in the study. Pearson correlation analysis was used for determining the relationship of academic achievement to scores obtained from the "Life skill Assessment Scale" and the "Attitude towards Alcohol Abuse Scale," whereas multiple regression analysis was used for determining whether the "Life skill Assessment Scale" and the "Attitude towards Alcohol Abuse Scale" together predicted academic achievement.

### Ethical consideration

The research approval was taken from the Department Research Committee (DRC), Department of Education, North-Eastern Hill University for conducting the research. Informed consent was obtained from all the participants before data collection. Confidentiality of data was ensured by storing the hard and soft copies of data in locked and password-protected spaces. The identity of all participants was kept confidential and anonymity was ensured in report writing and publication.

### Results

Table 1 showed that students had comparatively lesser mean scores in Coping with stress, Creative thinking, effective communication and problem-solving aspects of life skill. Descriptive analysis from table 2 showed that students had highest mean score on school-performance dimension of attitude towards alcohol abuse, followed by legal, health and social aspects.

Table 3 showed that a significant and positive correlation of 0.388 was found between life skills and academic achievements of students. Similarly, a negative and significant relationship between attitude toward alcohol abuse and academic achievement was evidenced. In further analysis, all dimensions of life skills were found to be positively and significantly associated with the academic achievement of students, whereas dimensions of attitude toward alcohol abuse had a significant but negative correlation with academic achievement.

Table 4 shows that life skills and attitude toward alcohol abuse significantly predict students' academic

**Table 1: Mean and standard deviation for academic achievement and life skill**

	<i>n</i>	Mean	Standard deviation
Academic achievements	726	332.9201	54.27632
Self-awareness	726	38.7810	6.28388
Empathy total	726	38.6281	5.80482
Effective communication	726	31.3292	4.80837
Interpersonal relationship	726	38.6584	6.16299
Creative thinking	726	28.0358	4.33257
Creative thinking	726	38.3898	5.69921
Decision making	726	38.2603	5.60908
Problem solving	726	31.9201	5.49726
Coping with emotions	726	38.4931	6.22071
Coping with stress	726	27.8278	5.13990
Like skills	726	350.3237	42.70675

**Table 2: Mean and standard deviation for attitude toward alcohol abuse**

	<i>n</i>	Mean	Standard deviation
School performance	726	27.2231	6.08286
Social aspects	726	18.7204	4.52552
Health aspects	726	20.4545	5.27349
Legal aspects	726	20.5207	5.50976
Attitude toward alcohol abuse	726	86.9187	16.10681

achievement (where the  $R = 0.391$ ,  $R^2 = 0.153$ ,  $P = 0.000$ ). Also, 15.3% ( $0.153 \times 100$ ) of the variance in academic achievements of the students was explained by life skills and attitude toward alcohol abuse together. Further, the *t*-test result reflects that both the variables had significant predictive power to predict students' academic achievement.

### Discussion

Comparatively low mean score on Coping with stress, Creative thinking, effective communication and problem-solving aspects of life skill was observed among students. It highlights the need for and improving these aspects of life-skills among students. Descriptive analysis of attitude towards alcohol abuse showed that student had highest score on school-performance aspect, which was further supported by the correlational analysis which showed an inverse relationship between attitude towards alcohol abuse and academic achievement of the students.

Life skills had a negative and significant relationship with attitude toward alcohol abuse, which is also supported by Bonyani *et al.*<sup>[35]</sup> A significant positive correlation was evidenced between life skills and the academic achievement of students. Core life skills, interpersonal relationships, creative thinking, and critical thinking had a stronger relationship and significantly influenced academic achievement. Joshi,<sup>[36]</sup> in his study, also found a positive association between life skills and academic

**Table 3: Correlation between life skills, attitude toward alcohol abuse, and academic achievement**

	Academic Achievement	Self Awareness	Empathy	Effective communication	Interpersonal Relationship	Creative Thinking	Critical Thinking	Decision Making	Problem Solving	Coping with Emotions	Coping with Stress	Like skills Total
Academic achievement	1	0.298*	0.295*	277*	0.314*	0.321*	0.322*	0.296*	0.249*	0.269*	0.299*	0.388*
School performance	-0.097*	-0.183*	-0.151*	-0.126*	-0.148*	-0.106*	-0.132*	-0.131*	-0.125*	-0.163*	-0.129*	-0.189*
Social aspects	-0.090*	-0.151*	-0.100*	-0.090*	-0.139*	-0.100*	-0.101*	-0.136*	-0.144*	-0.113*	-0.106*	-0.157*
Health aspects	-0.161**	-0.221**	-0.169**	-0.165**	-0.216**	-0.154**	-0.161**	-0.170**	-0.159**	-0.181**	-0.158**	-0.237**
Legal aspects	-0.082**	-0.163**	-0.126**	-0.137**	-0.157**	-0.074*	-0.155**	-0.132**	-0.122**	-0.126**	-0.114**	-0.174**
Attitude toward alcohol abuse	-0.143**	-0.240**	-0.184**	-0.174**	-0.219**	-0.144**	-0.184**	-0.188**	-0.181**	-0.195**	-0.169**	-0.253**

\*\*Correlation is significant at the 0.05 level (2-tailed)

achievement in adolescents, and similar findings were observed in other studies.<sup>[37,38]</sup> Therefore, interventions and activities, which are aimed at improving the life skills of adolescents should be integrated into the school curriculum so that their personal satisfaction and well-being are increased, which supports academic success.<sup>[39]</sup>

In the present study, a significant inverse relationship was found between attitude toward alcohol abuse and academic achievements<sup>[40]</sup> also, a significant and negative relationship was found between self-awareness, empathy, effective communication, and coping with emotions dimensions of life skills and attitude of school students toward alcohol and drug abuse. The studies<sup>[41]</sup> highlight that increase in alcohol consumption results in small yet statistically significant reductions in grade point average (GPA) for male students and statistically non-significant changes for females. For females, however, higher levels of drinking result in self-reported academic difficulty, which was contradicting our findings. Similarly, a study was conducted on whether alcohol consumption is associated with academic performance, where overall academic performance was not associated with any alcohol consumption measure.<sup>[42]</sup>

The result also found that life skills and attitudes toward alcohol abuse can influence the academic achievements of students. Both life skills and attitude toward alcohol abuse predicted 15.3% of academic achievements. With the rise in the level of life skills and unfavorable attitudes toward alcohol abuse leads to a rise in academic achievements. Savoji<sup>[38]</sup> in an exploratory study found out that life skill categories predicted an additional 9.4% of the variance in cumulative GPA beyond high school GPA and Scholastic Achievement test (SAT) scores. Of the four categories, physical fitness/health maintenance skills made a statistically significant, unique contribution to predicting cumulative GPA. Life skills (problem-solving, decision-making, and effective communication skills) have a significant relationship with academic achievement in addition to that they have the necessary prediction ability for the academic achievement of students.<sup>[37]</sup> Kaur and Sandhu<sup>[40]</sup> highlighted that life skills predict attitude toward alcohol and drug abuse where coping with emotions, problem-solving, and effective communication dimension of life skills emerged as a significant predictor of the attitude of college students toward alcohol and drug abuse.

**Limitation and recommendation**

Due to the constraint of coordination from schools, the final exam scores of class 11 are taken as academic achievement in the present study. Because sampled students are from different schools, it would be better

**Table 4: Results of the multiple regression analysis regarding the prediction of academic achievement by life skills and attitude towards alcohol abuse**

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
1					
(Constant)	180.07	20.94		8.60	0.000
Attitude towards alcohol abuse	0.48	0.04	0.376	10.64	0.000
Life skills	-0.16	0.12	-0.048	-1.34	0.179

<sup>a</sup>Dependent variable: achievement,  $R=0.391$ ,  $R^2=0.153$ ,  $F=62.58$ ,  $P=0.000$

to use standardized tests to measure students' academic achievement.

## Conclusion

Overall, the present study evidenced a positive relationship between life skills and students' academic achievements. However, a significant and negative correlation was found between attitude toward alcohol abuse and academic achievement. Together both the independent variables, that is, life skills and attitude toward alcohol abuse significantly predicted the academic achievement of school students. The findings of the present study present a strong case for effective inclusion and implementation of life skill education in the school curriculum.

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## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

## Conflicts of interest

There are no conflicts of interest.

## References

- Smith E, Swisher J, Hopkins A, Elek E. Results of a 3-year study of two methods of delivery of life skills training. *Health Educ Behav* 2006;33:325-39.
- Sarif N, Vandana. Stress, anxiety, and depression among adolescents in relation to sex and school management-An empirical study from Meghalaya, India. *Educ India J A Qurt Ref J Dial Educ* 2020;9:111-32.
- Desai M. A Rights-Based Preventive Approach for Psychosocial Well-Being in Childhood. Mumbai: Springer; 2010. p. 10.
- Galagali PM. Adolescence and life skills. In: Olyai R, Dutta DK, editors. *Recent Advances in Adolescent Health*. New Delhi: JAYPEE Brothers Medical Publishers (P) LTD; 2011. p. 209-18.
- Vranda M, Rao M. Life skills education for young adolescents and Indian experience. *J Indian Acad Appl Psychol* 2011;37:9-15.
- Puspakumara J. Effectiveness of life-skills training program in preventing common issues among adolescents: A community based quasi experimental study (ALST). Presentation, Department of Psychiatry Faculty of Medicine & Allied Sciences Rajarata University of Sri Lanka. 2011.
- Prajapati R, Sharma B, Sharma D. Significance of life skills education. *Contemp Issues Educ Res* 2017;10:1-6.
- Savoji AP, Ganji K. Increasing mental health of university students through life skills training (LST). *Proce Soc Behav Sci* 2013;84:1255-59.
- WHO. Life skills education for children and adolescents in schools. WHO/MNH/PSF/93.7A.Rev. 2. 1997. Available from: [http://whqlibdoc.who.int/hq/1994/WHO\\_MNH\\_PSF\\_93.7A\\_Rev\\_2.pdf](http://whqlibdoc.who.int/hq/1994/WHO_MNH_PSF_93.7A_Rev_2.pdf)
- Casey BJ, Getz S, Galvan A. The adolescent brain. *Developmental review*. 2008; 28 (1):62-77.
- Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychol Bull* 1992;112:64-105.
- Mallett KA, Bachrach RL, Turrissi R. Examining the unique influence of interpersonal and intrapersonal drinking perceptions on alcohol consumption among college students. *J Stud Alcohol Drugs* 2009;70:178-85.
- Espada Sánchez JP, Pereira JR, García-Fernández JM. Influence of social models on alcohol use among adolescents. *Psicothema* 2008;20:531-37.
- Dorsey HJ. Alcohol Abuse and alcoholism: Signs, Symptoms, Effects and Testing. *Helpguide*; 2006. p. 1-4.
- Botvin GJ, Kantor LW. Preventing alcohol and tobacco use through life skills training. *Alcohol Res Health* 2000;24:250-57.
- Huang CM, Chien LY, Cheng CF, Guo JL. Integrating life skills into a theory-based drug-use prevention program: Effectiveness among junior high students in Taiwan. *J Sch Health* 2012; 82:328-35.
- Mandel LL, Bialous SA, Glantz SA. Avoiding "Truth": Tobacco industry promotion of life skills training. *J Adolesc Health* 2006; 39:868-79.
- World Health Organisation. Adolescents: Health risks and solutions. 2016. Available from: <http://www.who.int/mediacentre/factsheets/fs345/en/>.
- World Health Organisation. Global status report on alcohol and health. 2018. Available from: <https://www.who.int/publications/i/item/9789241565639>.
- International Institute for Population Sciences, ICF. Mumbai. National Family Health Survey (NFHS-4) 2015-16. 2017. Available from: <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf>
- Bhalla A, Dutta S, Chakrabarti A. A profile of substance abusers

- using the emergency services in a tertiary care hospital in Sikkim. *Indian J Psychiatry* 2006;48:243-7.
22. UNDP. Human Development Report. 2014. Available from: <http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf>.
  23. Bacete FJG, Remírez JR. Family and personal correlates of academic achievement. *Psychol Rep* 2001;88:533-47.
  24. Pirmohamed S, Debowska A, Boduszek D. Gender differences in the correlates of academic achievement among university students. *J App Res Higher Educ* 2016;9. doi: 10.1108/JARHE-03-2016-0015.
  25. Onuoha UD, Ogunjinmi T, Owodunni M. Role clarity, self-concept and job satisfaction of library personnel in selected university libraries in Ogun State, Nigeria. *J Appl J Appl Inform Sci Technol* 2016;9:9-16.
  26. Kaur K, Kaur P. Academic achievement and achievement motivation as correlates of academic stress among secondary school students. *Int J Sci Res* 2016; 674-75.
  27. Chamundeswari S. Emotional intelligence and academic achievement among students at the higher secondary level. *Int J Acad Res Econ Manage Sci* 2013;2:178.
  28. Mwangi CN, Okatcha FM, Kinai TK, Ireri AM. Relationship between academic resilience and academic achievement among secondary school students in Kiambu County, Kenya. *Int J Sch Cog Psychol* 2015;S2:3.
  29. Nebbitt VE, Lombe M, LaPoint V, Bryant D. Predictors and correlates of academic performance among urban African American adolescents. *J Negro Educ* 2009;78:29-41.
  30. Fakeye DO. Students' personal variables as correlates of academic achievement in English as a second language in Nigeria. *J Soc Sci* 2010;22:205-11.
  31. Živčić-Bečirević I, Smojver-Ažić S, Martinac Dorčić T. Predictors of university students' academic achievement: A prospective study. *Društvena Istraživanja*:2017;26:457-76.
  32. Lodico MG, Spaulding DT, Voegtle KH. *Methods in Educational Research: From Theory to Practice*. John Wiley & Sons; 2010.
  33. McMillan, J. *Educational Research Fundamentals for the Consumer*. Boston: Pearson Education; 2008.
  34. Frankel JR, Norman EW. *How to Design and Evaluate Research in Education*. New York: McGraw Hill; 2006.
  35. Bonyani A, Safaeian L, Chehrazi M, Etedali A, Zaghian M, Mashhadian F. A high school-based education concerning drug abuse prevention. *J Edu Health Promot* 2018;7:88.
  36. Joshi U. The effect of training of life skills on the academic achievement and adjustment of the adolescents having conduct disorder and attention deficit hyperactive disorder (Doctoral Dissertation, Banasthali Vidyapith). 2014.
  37. Abdi M, Davoudi R. Investigating the relationship between life skills and academic achievement of high school students. *J Appl Environ Biol Sci* 2015;5:47-51.
  38. Pakdaman Savoiji A, Ganji K, Ahmadzadeh M. The Effect of life skills training on achievement motivation and academic achievement of students. *Social Welfare Quarterly* 2013;12:245-265.
  39. Sánchez Hernando B, JuárezVela R, Antón Solanas I, Gasch Gallén Á, Melo P, Nguyen TH, *et al.* Association between life skills and academic performance in adolescents in the autonomous community of aragon (Spain). *Int J Environ Res Public Health* 2021;18. doi: 10.3390/ijerph 18084288.
  40. Kaur J, Sandhu KK. Life skills as predictors of attitude of college students towards alcohol and drug abuse. *Int J Psychol Res* 2017;12:197-7.
  41. Balsa AI, Giuliano LM, French MT. The effects of alcohol use on academic achievement in high school. *Econ Educ Rev* 2011;30:1-15.
  42. El Ansari W, Stock C, Mills C. Is alcohol consumption associated with poor academic achievement in university students? *Int J Prev Med* 2013;4:1175-88.