



Effect of Life Skills Training on Employability Preparedness Using Cluster Analysis

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Abstract. The study is intended to explore the effect of life skills on the job preparedness of private university graduates of the Kanchipuram district. Skill training is required to prepare the young minds for facing the real life challenges. The existing study attempts to bring out the positive effects of life skills training on the outcomes to make graduates prepared for taking up a suitable job. The students were provided questionnaire to measure the level of employability preparedness with equal importance to problem-solving, decision-making, critical & creative thinking, communication, stress management and emotional intelligence skills. Hierarchical cluster analysis using Agglomeration Schedule was employed to explore the possible number of clusters and then K-means clustering was used to group the students based on the employability level into well prepared and not well prepared. The analysis revealed that the cluster formed as well prepared is 55% of the total 236 students showing the strong positive effect of life skills training on the employability preparedness.

Keywords: Job · Employability · Life Skills · Cluster Analysis

1 Introduction

1.1 Skill Training and Life Skills

Every educational institution concerns on the methods for preparing the graduates to get a job. Training is an essential component for making the graduates prepared to get employment. In particular, skill training is required for every graduate to become employable. On these grounds, formulating a skill training programme with key modules is indispensable for shaping the graduates to meet the challenges of job market. Graduate training programs and development programmes are offered by various institutes (Philips, Cognizant, National Grid and UNDP) across the world to bridge the gap between academic learning and corporate requirements. Amidst these, crafting a life skills training programme is at the centre of attention to make graduates prepared for facing the challenges of life. Barclay's Life skills training programme was launched in 2013 and remains successful across various countries towards shaping the students into highly employable citizens. Note that the first paragraph of a section or subsection is not indented.

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Life skills are essential in the dynamic environment across the world to face the challenges posed by technology, pandemic outbreak and new normalcy at the workplace. Life skills are vital for self-analysis and self-management to maintain a balance between physical and mental health.

Life skills are a set of day to day skills required by every human to face the challenges and problems encountered. UNICEF defines life skills as “a behaviour change or behaviour development approach designed to address a balance of three areas: knowledge, attitude and skills”.

“Life skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. Life skills are abilities that facilitate the physical, mental and emotional well-being of an individual” (WHO) UNICEF, UNESCO and WHO list the ten core life skill strategies and techniques as:

- Problem solving
- Critical thinking
- Effective communication skills
- Decision-making
- Creative thinking
- Interpersonal relationship skills
- Self-awareness building skills
- Empathy
- Coping with stress and
- Coping with emotions

1.2 Objectives

The need for the current study is to address the significance of life skills education, training in the present scenario and to explore the effect of life skills training on the employability preparedness level of students. The commerce and business administration students of the private university are given a week life skills training to measure the employability preparedness in them before and after the training. The purpose of the study extends to the categorization of the students into clusters based on the employability preparedness level reached by undergoing life skills training and respective demographic variables.

2 Review of Related Literature

2.1 Employability Preparedness and Skill Training

An analysis of the factors affecting the academic career of dyslexia affected university students in Italy (Ilaria, Marcella, Valentina, Juri, Tony, Andrea and Calabrò, 2022). The team of researchers categorized the students based on birth year, student type, dyslexia diagnosis, aid received and repetition of school. The explorative study segmented the students by the difficulties faced, required support tools and learning strategies for finding positive effect towards the specific learning disorder [SLD] through virtual reality and

artificial intelligence. The outcome of the study suggests that the provision of digital supporting tools through AI to the students help them to overcome the major difficulties such as motivation and self-esteem in the learning process.

An examination on the 'perceptions of students towards preparedness for transition to work after graduation' (García-Aracil, Monteiro and Almeida, 2021). The researchers analyzed the student perceptions through parameters such as academic engagement, knowledge and competencies to explore the predicting factors of job preparedness. The study reveals that participation in lecture sessions and collaborative work has positive effect on the job preparedness of the students than mere regular attendance for lectures. The result of research study uncovers that students perceive a larger focus on the practical and theoretical content for positive impact on the preparedness for transition from academics to job.

The research study on Life skills development through sport in Brazil using cluster analysis (Nascimento Junior, Freire, Quinaud, Oliveira and Cronin, 2021). The investigation was directed towards the impact of demographic and self-determination theory variables on the development of life skills through Brazilian youth sport among the categorized two clusters 'high life skills development' and 'low life skills development'. The consequence of the investigation unveils that the Brazilian youth sport participants of old age and handful experience showed higher life skills development exhibiting basic need satisfaction, sport motivation and autonomy support.

The investigation attempted to find the positive change in the level of students after a life skills intervention programme (Menka and Reena, 2019). The researcher used two groups namely 'experiment group' and 'control group' for testing the skill level of students before and after the life skills intervention based on the Life Skills Assessment Scale (Radhakrishnan Nair, Subasree and Sunitha Ranjan, 2010). The outcome of the investigation signifies that there is considerable increase in the life skill level of students in the 'experiment group' after the implementation of life skills intervention programme.

An attempt made to study the effectiveness of life skill training/education program on the management students (Somasundaram, 2018). The researcher examined the way in which life skills learning was viewed by the management students of college for developing key competencies. The study signifies that the implementation of life skills training program helps students for developing cognitive, social and self-management skills bringing positive change in the attitude and behaviour to face the real life challenges.

The exploratory study on 'Life Skills Intervention and its impact on the Study Skills among Young Adolescents' (Daisy and Radhakrishnan Nair 2018) were aimed at finding out the essential life skills competencies for the overall development of students. Life skills training based on the components self-awareness, effective communication, critical & creative thinking, problem solving, decision making, interpersonal relationship, empathy, coping with stress and emotion were given to 8th standard students through role plays, demonstration, brainstorming, video visuals, discussions and simulations. The outcome of the study reveals that life skills training have a positive impact on the behaviour, emotional well-being and academic improvement of the adolescents for cognitive and social development.

The research study to measure the effect of academic performance and involvement in the internship program toward life skills and the influence of resultant life skills

on the work readiness of university graduates (Prianto, Asmuni and Maisaroh, 2017). The analysis throws light on the importance of teaching quality life skills to university graduates for new ideas, leadership quality and state-of-the-art technological knowledge. The research discloses that the involvement in the internship program has significant effect on the life skills learned and directly impacts the job preparedness/work readiness of graduates while the academic performance of students has less positive effect on the value of life skills and work readiness of graduates.

The research study was carried out for testing the effectiveness of life skills education program among high school children who were considered weak in academics (Gayatri and Lakshmana, 2017). The researcher analyzed the children with poor parental supervision whose parents were either illiterates or low education. The result of the analysis conveyed that the children from rural background with lack of self-awareness, creative and critical thinking was significantly improved through life skills education programme for increase in academic performance.

An investigation was administered to explore the ‘importance of life skills education to the adolescents for bringing social and emotional development through critical and creative thinking’ (Prajapati, Sharma and Sharma, 2017). The researchers focused on the ways of imparting life skills education in the classroom for widening the knowledge, shaping the attitude and enriching the skills of students through story-telling, role-plays, group discussions, brainstorming, debates, educational simulations, situation and case analysis. The study suggests that the establishment of life skills education programme in the curriculum is vital to address the needs of present day students for motivation, instilling self-confidence, sharpening the thought process, strengthening the cognitive abilities, self-management skills, and making ready to face the challenges of everyday life.

The research was navigated to address the significance of life skills education and training to the student community for preparing themselves Amidst the global competition and competency (Singh and Gera, 2015). The study examines the necessity of learning life skills to prepare the students through a blend of knowledge, skills, attitudes and values in the modern world for registering success. The investigation suggests that inculcating life skills into the educational framework allow the young minds to understand themselves better, creates awareness on dynamic environment, develop tolerance, and provides deep knowledge on cross-cultural management to bring a fit between their skill set and demand of business for global competency.

The study was rooted on the life skill development initiatives and job preparation for high school students with behavioral and emotional incapacity (Swank and Huber, 2013). The study was carried out as a team by an academician and school counselor for successfully transforming the students with cognitive disabilities into employable citizens by promoting social, work, life skills and emotional development. The life skill development initiatives included school vegetable garden, raised worm bed, sewing group and community collaboration which supported the students with a reflection of considerable increase in their GPA and helped them to become prolific citizens.

The research study towards “Influence of Life Skills Training on the Preparedness of Secondary Students Entering Post-Secondary Education and/or the Workforce” was grounded on the influence of parents and teachers in the life skills learning process

and job preparedness of secondary students (Juarez, 2011). The study employed survey questionnaire to two sets of targeted population from 'South Kitsap High School (SKHS) and West Sound Technical Skill Center (WST)' for analyzing the effect of life skills learning on the preparedness of secondary graduating students. The results of the research study suggests that understanding the value of life skills remained same for two groups whereas parent influence, teacher contribution and the parent/teacher/school relationship have substantial effect on the development of students towards job/workplace preparedness.

2.2 Research Hypothesis

H1: Life skills training have positive effect on the employability preparedness.

2.3 Research Gap

Skill training is essential for every student irrespective of education in school or college. The new normalcy established by the impact of COVID-19 pandemic restricted the students in learning basic life skills. Learning and practicing a set of skills required for everyday life to overcome the challenges and to increase employability is the order of the day for every student across every educational institution. The research studies carried out by (Ilaria et al., 2022, Pandey et al., 2022, García-Aracil et al., 2021, Nascimento Jr et al., 2021, Menka & Reena, 2019, Somasundaram, 2018, Daisy and Radhakrishnan Nair, 2018); explored the significance of life skills training and education for preparing the young minds with social and cognitive skills towards the next stage of life. The present study foresees the importance of life skills and its effect on the employability preparedness of graduates.

3 Research Methodology

Life skill training was conducted among the 236 graduands of commerce and management. Questionnaire covering the key components of life skills to measure the level of employability preparation was circulated to the students before and after the training.

The research study is comprised of multivariate data analysis techniques such as hierarchical and k-means cluster analysis for grouping the students based on employability preparedness.

4 Analysis, Results and Interpretation

The demographic profile of the respondents signifies that the female students are higher than male in attending the life skills training. The majority of the respondent students belong to the age group of 17–18 and commerce discipline (Tables 1 and 2).

The agglomeration schedule table after the life skills training clearly suggest that the cluster coefficient of stage 234 has a significant amount of difference and from stage 233 there is small difference between cluster coefficients indicating the two possible clusters (Figs. 1 and 2).

Table 1. Demographic Profile.

S.No.	Description	Category	Frequency	Percentage
1	Gender	Male	112	47.5
		Female	124	52.5
2	Age	17–18	88	37.3
		19–20	72	30.5
		21–22	76	32.2
3	Programme	B.COM	159	67.4
		BBA	77	32.6

Table 2. Agglomeration Schedule.

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	101	177	1.000	0	0	11
2	194	229	2.500	0	0	95
3	164	224	4.000	0	0	26
4	22	207	5.500	0	0	79
5	62	195	7.000	0	0	122
6	18	170	8.500	0	0	80
7	153	168	10.000	0	0	43
229	3	17	2624.527	219	225	232
230	4	9	2739.517	212	227	233
231	5	11	2911.387	226	214	234
232	3	15	3165.400	229	223	234
233	1	4	3449.865	228	230	235
234	3	5	3842.657	232	231	235
235	1	3	4725.593	233	234	0

Source: SPSS 15.0

NUMBER OF CASES = 236

NUMBER OF STAGES = 234

NUMBER OF CLUSTERS = 236 – 234 = 2

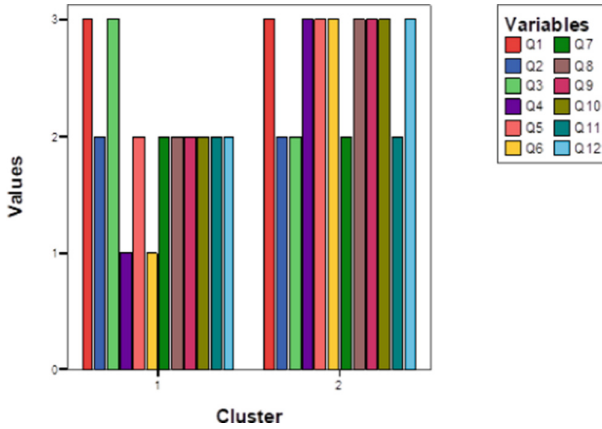


Fig. 1. Final Cluster Centers Before Life Skills Training

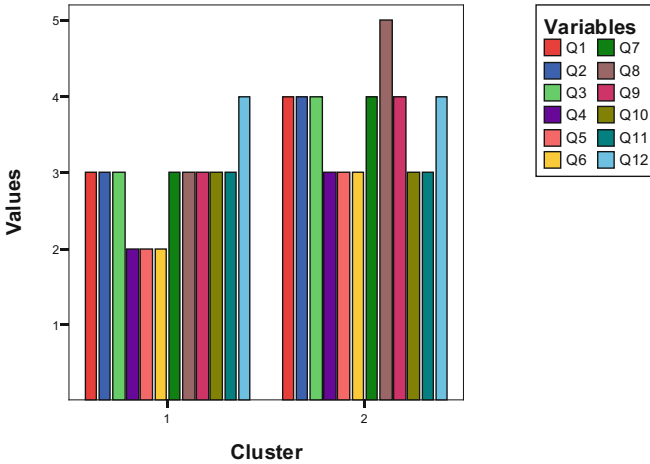


Fig. 2. Final Cluster Centers After Life Skills Training. Source: SPSS 15.0

The figures of the final cluster centers before and after the training displays the positive effect of life skills training in the employability preparedness of the graduates. There is significant difference between the formed cluster 2 with high values before and after the training (Tables 3, 4, 5 and 6).

The final cluster centers table clarifies that cluster 2 is formed for responses with higher value and the ANOVA table depicts that the p-value for all 12 variables is <0.05 demonstrating significant difference between the variables in the clustering process. The number of cases in each cluster varies before and after the training. The 2 clusters formed (cluster 1 – not well prepared and cluster 2 – well prepared) are further classified based on the demographic items gender, age and degree programme. The cluster 2 represents 41% before the training and by an increase to 55% after the life skills training explains the strong positive effect on employability preparedness.

Table 3. ANOVA.

	Cluster		Error		F	Sig.
	Mean Square	Df	Mean Square	df	Mean Square	df
Q1	71.990	1	.901	234	79.874	.000
Q2	101.391	1	.939	234	107.985	.000
Q3	105.808	1	1.181	234	89.585	.000
Q4	63.285	1	1.724	234	36.703	.000
Q5	52.157	1	1.361	234	38.334	.000
Q6	77.654	1	1.492	234	52.030	.000
Q7	212.091	1	.805	234	263.572	.000
Q8	145.153	1	.809	234	179.461	.000
Q9	196.684	1	.887	234	221.855	.000
Q10	15.573	1	1.383	234	11.263	.001
Q11	18.704	1	1.495	234	12.512	.000
Q12	35.619	1	.744	234	47.859	.000

Table 4. Number of Cases in Each Cluster – Before Life Skills Training.

Cluster	1	138.000
	2	98.000
Valid		236.000
Missing		.000

Table 5. Number of Cases in Each Cluster – After Life Skills Training.

Cluster	1	105.000
	2	131.000
Valid		236.000
Missing		.000

Source: SPSS 15.0

Table 6. Cluster classification based on demographic variables After the Training.

S.No.	Description	Category	Cluster 1	Cluster 2
1	Gender	Male	51	61
		Female	54	70
2	Age	17–18	38	50
		19–20	29	43
		21–22	38	38
3	Programme	B.COM	69	90
		BBA	36	41

5 Findings and Conclusion

The explorative research study infers that there is positive effect of the life skills training on the employability preparedness of students using the cluster analysis. The outcome of the study clarifies that life skills training comprising the critical & creative thinking, communication skills, problem-solving & decision-making skills, self-awareness, empathy, stress management and emotional intelligence has a strong positive effect on the employability preparedness of the students.

The results convey that irrespective of the gender, age and programme, the life skills training positively affect the students for employability preparation. The investigative study concludes that through hierarchical and k-means cluster analysis the employability preparedness level of students after life skills training is positively influenced.

6 Limitation and Scope

The present study is confined to the commerce and business administration students of private university in Kanchipuram within the sample of 250.

The research could be carried out with other disciplines of arts and science students and to the engineering graduates for identifying the impact level of life skills training and education for inculcating the work readiness/job preparedness.

6.1 Social and Managerial Implications

The life skills variables considered for the present study throws light on the aspiring graduates to prepare themselves for enhancing employability potential. The educational institutions could devise a life skills training programme for educating the young minds to face and win over the challenges of day-to-day life.

The employers could understand the vitality of life skills to the fresh and existing employees for better productivity and quality of work. Life skills training programme could be designed jointly by the educational institutions and employers effectively through including the required skill components for nurturing the young minds to get equipped towards career and life challenges.

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