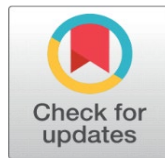


DEVELOPMENT AND STANDARDIZATION OF A LIFE SKILLS ASSESSMENT SCALE (LSAS-21)

Shumila Fatma Naqvi ¹✉, Dr. Ritu Chandra ²

¹ Research Scholar, Institute of Education Research, Shri Ramswaroop Memorial University, Village-Hadauri, Post-Tindola, Lucknow -Deva Road, Barabanki, Uttar Pradesh, India

² Principal, Institute of Education Research, Shri Ramswaroop Memorial University, Village-Hadauri, Post-Tindola, Lucknow –Deva Road, Barabanki, Uttar Pradesh, India



Received 15 February 2026

Accepted 05 April 2026

Published 01 May 2026

Corresponding Author

Shumila Fatma Naqvi,
Shumila.Fatma.Naqvi@Outlook.com

DOI

[10.29121/shodhkosh.v7.i7s.2026.7914](https://doi.org/10.29121/shodhkosh.v7.i7s.2026.7914)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2026 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.

ABSTRACT

The present study focuses on the development and standardization of a Life Skills Assessment Scale (LSAS-21) designed to measure essential psychosocial competencies required for effective functioning in daily life. Life skills such as self-awareness, communication, resilience, empathy, participation, critical thinking, creativity and problem-solving, decision-making, and negotiation play a crucial role in personal, social, and academic adjustment.

The initial item pool was developed after an extensive review of literature and existing life skills frameworks. The scale was prepared using a Likert-type format and evaluated by subject experts for content validity. A pilot study was conducted on a sample of $N = 30$, and the reliability was found to be high ($\alpha = 0.953$). Principal Component Analysis (PCA) indicated a multidimensional structure of the scale.

The main standardization study was conducted on a sample of $N = 400$, and the reliability of the final scale was $\alpha = 0.702$. Construct validity was examined using correlation analysis and factor analysis. Pearson's correlation showed positive and significant relationships among items, indicating a common underlying construct. Further, Principal Component Analysis with Varimax rotation supported the suitability of the data for factor analysis. The KMO value was 0.755, and Bartlett's Test of Sphericity was significant ($\chi^2 = 837.690$, $df = 210$, $p < .001$), confirming adequacy for factor analysis.

The final LSAS-21 consists of 21 items covering nine dimensions: Self-Awareness, Communication, Resilience, Empathy, Participation, Critical Thinking, Creativity and Problem Solving, Decision Making, and Negotiation. The scale demonstrates satisfactory psychometric properties and can be effectively used by researchers, counselors, and educators for assessing life skills.

Keywords: Life Skills, Scale Development, Standardization, Psychosocial Competence, Assessment Scale



1. INTRODUCTION

Life skills are essential abilities that enable individuals to effectively cope with the challenges of daily life, make informed decisions, and maintain emotional and social well-being. These skills include self-awareness, communication, resilience, empathy, problem-solving, creativity, decision-making, and negotiation. In contemporary society, where individuals face increasing academic, social, and professional pressures, the development and assessment of life skills have become crucial for fostering personal growth, social competence, and overall well-being.

The present tool is based on the life skills frameworks of the **World Health Organization** and **UNICEF**, which define life skills as essential abilities for effectively dealing with everyday challenges. **WHO** emphasizes skills such as decision-making, problem-solving, communication, and emotional management, while **UNICEF** provides a broader developmental perspective integrating cognitive, emotional, and social competencies.

The present study on the development of a Life Skills Scale is based on several established psychological theories that explain behaviour, learning, and personal development.

These frameworks are further supported by **Albert Bandura's Social Learning Theory**, which explains that life skills are acquired through observation, modelling, and reinforcement within social contexts, highlighting that such skills can be developed through structured learning and practice. In addition, **Erik Erikson's Psychosocial Development Theory** highlights that individuals develop essential competencies such as identity formation, emotional regulation, and interpersonal skills across different life stages, particularly during adolescence.

Problem Behaviour Theory (Richard Jessor) explains that behaviour results from the interaction of personality, environment, and behaviour systems, highlighting the role of life skills in reducing risk behaviours. Social Influence Theory emphasizes the impact of peers and social norms, supporting skills like communication, assertiveness, and decision-making to resist negative pressures.

Cognitive Behavioural Theory (Beck and Ellis) suggests that thoughts, emotions, and behaviours are interconnected, making skills like critical thinking and emotional regulation essential for positive adjustment. Resilience and Risk Theory focuses on coping with adversity, highlighting resilience as a key protective factor.

Humanistic theories by Maslow and Rogers emphasize self-actualization, empathy, and personal growth, supporting self-awareness and emotional development. Pavlov's Classical Conditioning Theory explains how behaviours are learned through association and reinforcement.

The study by **Ndirangu, Wamue-Ngare, and Wango (2013)** This study highlights gender-based barriers in the implementation of Life Skills Education, showing differences in teaching and learning experiences. It supports the need for a Life Skills Scale that can assess life skills across genders and identify such contextual differences.

This study by **Subasree and Nair (2014)** is directly related to the present Life Skills Scale as it provides a validated framework for developing and measuring life skills. It supports the construction and reliability process of the current scale.

Based on these frameworks, the tool includes key dimensions such as decision-making, problem-solving, critical thinking, communication, interpersonal relationships, self-awareness, empathy, and coping with stress and emotions, ensuring strong theoretical grounding and construct relevance.

In the present study, two different samples were utilized for the development and standardization of the Life Skills Assessment Scale (LSAS-21). The **pilot sample** (N = 30) was employed during the initial stage to examine item clarity, remove weak items, and establish preliminary reliability. This stage ensured that only relevant and psychometrically sound items were retained in the final tool. Subsequently, a **larger and independent sample** was collected for the main study to establish the final psychometric properties, including reliability, validity, and norms. Using two different samples enhanced the **generalizability** of the scale, as the results were not limited to a single group but instead demonstrated the robustness of the tool across diverse participants. This methodological approach is consistent with best practices in psychological test construction, where pilot testing is followed by standardization on a different and larger sample to ensure greater accuracy and representativeness.

2. NEED FOR THE LIFE SKILLS ASSESSMENT SCALE (LSAS-21)

Life skills play a vital role in personal, social, and professional development. However, comprehensive assessment tools that evaluate multiple dimensions of life skills in a structured and reliable manner are limited. The Life Skills Assessment Scale (LSAS-21) was developed to provide a concise and psychometrically sound measure of key life skills across four domains: Empowerment, Citizenship, Learning, and Employability. By assessing these skills systematically, the LSAS-21 can help educators, counselors, and researchers identify areas of strength and growth, facilitate targeted interventions, and promote holistic development in individuals.

3. DESCRIPTION OF THE LIFE SKILLS ASSESSMENT SCALE (LSAS-21)

The Life Skills Assessment Scale (LSAS-21) to assess life skills among secondary school students. The scale consists of 21 items covering 9 dimensions: Self-Awareness (1), Communication (1), Resilience (4), Empathy (3), Participation (3), Critical Thinking (2), Creativity (includes problem-solving) (4), Decision Making (1), and Negotiation (2). All dimensions fall under 4 broader factors: **Emotional Competence, Social Competence, Cognitive Competence, and Adaptive Competence**. Each item is rated on a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5).

The tool was validated by experts from psychology and education to ensure content validity. A pilot study was conducted on 30 students, and the scale demonstrated satisfactory reliability (Cronbach's Alpha and Split-Half reliability). Item-total correlations were also found to be within the acceptable range. Higher scores on the scale indicate a greater level of life skills proficiency.

Table 1

Table 1 Life Skills Factor and its Dimensions	
Factor	Dimensions/Skills
Emotional Competence	Self-Awareness, Communication, Resilience
Social Competence	Empathy, Participation
Cognitive Competence	Critical Thinking, Creativity (includes problem-solving)
Adaptive Competence	Negotiation, Decision-Making

4. TOOL DEVELOPMENT AND ITEM REFINEMENT

The development of the life skills assessment tool followed a systematic process to ensure content validity and reliability. Initially, an item pool of 109 questions was generated based on an extensive review of the literature and expert recommendations. These items were designed to comprehensively cover all relevant dimensions of life skills. Following preliminary screening by a panel of experts, items that were ambiguous, redundant, or irrelevant were removed. The refined 27-item version was then administered to a pilot sample (n = 30) to evaluate its psychometric properties. Item analysis, including item-total correlation and exploratory factor analysis, was conducted. Based on the results, items with low correlations or poor factor loadings were eliminated, yielding a final tool comprising 21 items. The final scale demonstrated adequate internal consistency and construct validity, confirming its appropriateness for assessing life skills in the target population.

Table 2

Table 2 Item Refinement Process		
Stage	Number of Items	Description
Initial Item Pool	109	Generated from literature review and expert suggestions.
Expert Screening	27	Items reviewed for clarity, relevance, and redundancy; low-quality items removed.
Pilot Testing & Finalization	21	Items with low item-total correlation or poor factor loadings were removed; the final tool was established.

The Life Skills Assessment Scale ((LSAS-21 measures nine (9) dimension of Life Skills as mentioned below:

Table 3

Table 3 Life Skills Dimensions and Number of Items		
S. No.	Life Skills Dimension	Number of Items
1	Self-Awareness	1
2	Communication	1
3	Resilience	4
4	Empathy	3
5	Participation	3
6	Critical Thinking	2
7	Creativity (+ Problem Solving)	4
8	Decision Making	1
9	Negotiation	2
	Total	21

5. STANDARDIZATION PROCEDURE OF THE LIFE SKILLS ASSESSMENT SCALE (LSAS-21)

The Life Skills Assessment Scale (LSAS-21) was developed to measure life skills among secondary school students. The tool comprises 21 items distributed across 9 core dimensions of life skills: Self-Awareness (1), Communication (1), Resilience (4), Empathy (3), Participation (3), Critical Thinking (2), Creativity (includes problem-solving) (4), Decision Making (1), and Negotiation (2).

The Rotated Component Matrix (Table 4) shows the factor loadings of individual items on the four extracted components. Factor loadings ≥ 0.50 were considered significant for factor assignment. Based on theoretical relevance and loading patterns, the factors were labelled as **Emotional Competence, Social Competence, Cognitive Competence, and Adaptive Competence**. The factor analysis demonstrates a **clear and interpretable four-factor structure**.

5.1. INTERPRETATION OF FACTORS

1) Emotional Competence

This factor reflects self-awareness and resilience, capturing the individual's ability to cope with stress, adapt to challenges, and regulate emotions effectively.

2) Social Competence

This factor emphasizes empathy, communication, and participation, highlighting interpersonal effectiveness, social awareness, and the capacity for community engagement.

3) Cognitive Competence

This factor includes critical thinking and creativity, representing analytical, innovative, and problem-solving skills essential for lifelong learning.

4) Adaptive Competence

This factor focuses on decision-making and negotiation in applied contexts, reflecting adaptability, employability, and real-world problem-solving abilities.

The high cumulative variance explained, minimal cross-loadings, and strong alignment of items with theoretical constructs support the **tool's construct validity**, making it suitable for **educational, counselling, and developmental assessments**.

Table 4

Table 4 Rotated Component Matrix (Varimax) with Factor Labels						
S.No	Item No.	Component 1	Component 2	Component 3	Component 4	Factor Label
1	Item-1	.096	.161	.567	.561	Social Competence
2	Item-2	.249	.517	.193	.730	Adaptive Competence
3	Item-3	.055	.235	.820	.151	Emotional Competence
4	Item-4	.086	.416	.325	.634	Emotional Competence
5	Item-5	.179	.238	.085	.878	Emotional Competence
6	Item-6	.512	.203	.526	.172	Emotional Competence
7	Item-7	.748	.224	-.015	.287	Social Competence
8	Item-8	.795	.151	.162	.195	Social Competence
9	Item-9	.679	.628	-.017	.090	Social Competence
10	Item-10	.642	.331	.597	-.212	Cognitive Competence
11	Item-11	.594	.305	.451	-.009	Social Competence
12	Item-12	.285	.851	.241	.210	Social Competence
13	Item-13	.031	.843	.275	.205	Cognitive Competence
14	Item-14	.338	.684	.088	.268	Cognitive Competence
15	Item-15	.703	.030	.097	.550	Cognitive Competence
16	Item-16	.212	.284	.624	.228	Cognitive Competence
17	Item-17	.810	.382	.261	.174	Cognitive Competence
18	Item-18	.756	.221	.283	-.025	Cognitive Competence
19	Item-19	.593	-.184	.630	.240	Cognitive Competence
20	Item-20	.329	.685	.307	.302	Adaptive Competence
21	Item-21	.632	.669	.147	.269	Adaptive Competence

Note. Bolded values indicate primary factor loadings (≥ 0.50) used to assign items to the respective factor.

A Principal Component Analysis (PCA) with Varimax rotation was conducted to examine the underlying structure of the tool. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.679, indicating that the sample size was acceptable for factor analysis. Bartlett's test of sphericity was significant, $\chi^2 (210) = 664.681, p < .001$, confirming that the correlation matrix was suitable for PCA.

The PCA revealed four components with eigenvalues greater than 1, which collectively accounted for 77.45% of the total variance (Table 5). Component 1 explained 26.75%, Component 2 explained 21.04%, Component 3 explained 15.28%, and Component 4 explained 14.38% of the variance. These results indicate that the extracted factors capture a substantial portion of variability in the data, supporting the adequacy of the factor solution.

Table 5

Table 5 Total Variance Explained Table									
Component	Initial Eigenvalues	% of Variance	Cumulative %	Extraction Sums of Squared Loadings	% of Variance ²	Cumulative % ³	Rotation Sums of Squared Loadings	% of Variance ⁴	Cumulative % ⁵
1	11.023	52.490	52.490	11.023	52.490	52.490	5.617	26.749	26.749
2	2.193	10.442	62.932	2.193	10.442	62.932	4.419	21.042	47.790
3	1.637	7.794	70.726	1.637	7.794	70.726	3.209	15.283	63.073
4	1.412	6.723	77.449	1.412	6.723	77.449	3.019	14.375	77.449

Item Development

Items were constructed after a comprehensive review of relevant frameworks and literature, including the guidelines of UNICEF, WHO, and NCERT on life skills education. The items were framed on a **5-point Likert scale** ranging from Strongly Disagree (1) to Strongly Agree (5). The preliminary pool of items was drafted in simple and age-appropriate language for secondary school students

Pilot Study

A pilot study was conducted on **30 secondary school students** in Lucknow to assess the clarity of instructions, comprehensibility of items, and the approximate time required for completion. Feedback from participants confirmed the suitability of the items for the target population.

Preliminary descriptive statistics (mean, standard deviation) were prepared for the group.

The Life Skills tool was administered to a sample of 30 respondents to establish normative data. The mean and standard deviation (SD) scores obtained from the participants are presented below:

Table 6

Table 6 Mean and Standard Deviation			
S. No.	Dimension	Item	Mean ± SD
1	Self-Awareness	Item 2	1.97± .964
2	Communication	Item 1	1.83± 1.147
3	Resilience	Item 1	1.80 ± .887
4	Resilience	Item 2	1.90 ± .995
5	Resilience	Item 3	2.03 ± 1.033
6	Resilience	Item 4	1.93± 1.015
7	Empathy	Item 1	2.10 ± .960
8	Empathy	Item 2	2.03 ± .850
9	Empathy	Item 3	1.93± 1.172
10	Participation	Item 2	2.07 ± 1.230
11	Participation	Item 3	2.10 ± 1.094
12	Participation	Item 4	2.07 ± 1.202
13	Critical Thinking	Item 1	1.93 ± 1.081
14	Critical Thinking	Item 3	2.00± .830

15	Creativity (+ Problem Solving)	Item 2	2.03 ± 1.098
16	Creativity (+ Problem Solving)	Item 3	2.03 ± .964
17	Creativity (+ Problem Solving)	Item 4	1.90± 1.062
18	Creativity (+ Problem Solving)	Item 5	1.97± 1.033
19	Decision Making	Item 2	1.76 ± 1.057
20	Negotiation	Item 1	1.66 ± .974
21	Negotiation	Item 2	1.62± .820

Pilot Reliability

The reliability of the scale was determined using the data obtained from the pilot sample.

Internal Consistency: Cronbach's Alpha was computed for the overall scale and found to be within the acceptable range. The internal consistency of the 21-item life skills tool was assessed using multiple reliability indices. The **Cronbach's Alpha** for the scale was **.953**, and the Cronbach's Alpha based on standardized items was also **.953**.

Table 7

Table 7 Internal Consistency through Cronbach Alpha		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	No of items
0.953	0.953	21

Split-Half Reliability: The test was divided into odd-even items, and reliability was calculated using the **Spearman-Brown Prophecy Formula** and **Guttman Split-Half coefficient**, both indicating satisfactory reliability. The **split-half reliability** of the 21-item life skills tool was assessed to examine internal consistency. The **Spearman-Brown coefficient** was **0.972**, and the **Guttman Split-Half coefficient** was also **0.972**, indicating excellent reliability. These high values confirm that the two halves of the scale produce consistent and stable scores, further supporting the overall reliability of the tool.

Table 8

Table 8 Internal Consistency through Spearman-Brown Prophecy Formula and Guttman Split-Half coefficient		
Spearman-Brown coefficient,	Guttman Split-Half coefficient,	No. of items
0.972	0.972	21

Item-Total Correlation: Correlations between each item and the total score were examined. The item analysis indicates that all 21 items demonstrate strong **corrected item-total correlations**, ranging from **.534 to .901**, well above the acceptable threshold of **.30**. This suggests that each item contributes meaningfully to the overall scale and measures the intended construct consistently. The **Cronbach's Alpha if Item Deleted** values show minimal change, indicating that removing any item would not significantly improve the internal consistency. The overall **Cronbach's Alpha of .95** confirms excellent reliability, demonstrating that the tool is highly consistent and suitable for assessing multidimensional life skills in educational, social, and professional contexts.

Table 9

Table 9 Item-Total Correlation			
S. No	Item No.	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Item-1	.566	.952
2	Item-2	.759	.950
3	Item-3	.534	.952
4	Item-4	.619	.951
5	Item-5	.572	.952
6	Item-6	.681	.951
7	Item-7	.650	.951

8	Item-8	.689	.951
9	Item-9	.747	.950
10	Item-10	.716	.950
11	Item-11	.690	.951
12	Item-12	.786	.949
13	Item-13	.625	.952
14	Item-14	.677	.951
15	Item-15	.672	.951
16	Item-16	.602	.952
17	Item-17	.866	.948
18	Item-18	.669	.951
19	Item-19	.594	.952
20	Item-20	.784	.949
21	Item-21	.901	.948

Pilot Validity

The validity of the tool was examined through **construct and content validity**.

- **Construct Validity**

Principal Component Analysis (PCA) revealed a clear **four-factor structure—Emotional Competence, Social Competence, Cognitive Competence, and Adaptive Competence**, which aligns with the theoretical framework of life skills. The **rotated component matrix** showed that most items loaded strongly (≥ 0.50) on their respective factors, with minimal cross-loadings. This indicates that items effectively measure the intended constructs. The distinct separation of factors also provides evidence for **convergent and discriminant validity**, as items within each factor correlate well while remaining distinct from other factors.

- **Content Validity**

The draft scale was subjected to expert validation. A panel of **five experts** from the fields of educational psychology, guidance and counselling, and teacher education reviewed the items for relevance, clarity, and alignment with the construct. Based on their feedback, redundant or ambiguous items were revised or eliminated. This process ensured the **content validity** of the tool.

The findings from the pilot study indicated that the LSAS-21 demonstrated acceptable levels of reliability and validity. However, given the small sample size, these results were considered preliminary. To strengthen the psychometric properties of the tool and establish robust norms, the scale was further administered to a larger, more diverse sample in the Final Standardization Phase (N = 400).

Standardization of the scale

The standardization of this scale was administered on a randomly selected sample of 400 students, both boys and girls, studying in secondary and senior secondary schools in Lucknow city.

Reliability

The reliability of the scale was determined using data from the 400-sample.

In internal consistency, the Likert scale, used to measure Cronbach's alpha, is the most common measure of reliability. The **Cronbach's Alpha** for the scale was **.702**, which is a good reliability index; items indicate an **acceptable level of internal consistency** (George & Mallery, 2003). This suggests that the items in the scale are sufficiently correlated and measure the same underlying construct.

Table 10

Table 10 Internal Consistency through Cronbach Alpha	
Cronbach's Alpha	No of items
0.702	21

Validity

The validity of the tool was established through content and construct validity. Content validity was ensured through expert evaluation. A total of five experts in the field reviewed the 21 items for their relevance, clarity, and representativeness of the construct. Based on their feedback, necessary modifications were made and the final version of the tool was prepared.

Construct validity was examined using both correlation analysis and factor analysis. Pearson's correlation among the items indicated positive and statistically significant relationships, suggesting that the items measure a common underlying construct. The magnitude of correlations ranged from low to moderate, which is considered appropriate in psychological research, as it reflects meaningful association without redundancy (Andy Field, 2005; J. C. Nunnally & Bernstein, 1994).

Further, factor analysis (Principal Component Analysis) with Varimax rotation was conducted to examine the underlying structure of the scale. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be **0.755**, indicating that the sample was adequate for factor analysis. According to Henry Kaiser (1974), values above 0.70 are considered acceptable. Bartlett's Test of Sphericity was statistically significant ($\chi^2 = 837.690$, $df = 210$, $p < .001$), indicating that the data were suitable for factor analysis.

The analysis revealed **four components with eigenvalues greater than 1**, supporting the presence of meaningful underlying factors. The rotated component matrix showed that most items had factor loadings above 0.40, indicating good representation of the underlying dimensions. The communalities of most items were also above the acceptable level (≥ 0.30), suggesting that the items shared sufficient variance with the extracted factors (J. C. Nunnally & Bernstein, 1994).

Although a few items showed relatively lower loadings or weak correlations, the overall pattern of relationships among the items supports a coherent and interpretable factor structure. Therefore, based on these findings, the scale demonstrates satisfactory construct validity and is appropriate for measuring the intended construct.

Scoring Procedure

Each item is scored on a 5-point scale (1 = Strongly Disagree, 5 = Strongly Agree). Scores for each dimension are obtained by summing the responses of items belonging to that dimension. A **total life skills score** is derived by adding all item scores. Higher scores indicate better proficiency in life skills.

Table 11

Table 11 Scoring of Life Skills Scale Items	
Response Category	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

6. DISCUSSION

The present study aimed to develop and standardize a psychological tool to assess the targeted construct. The reliability analysis revealed a Cronbach's alpha of **0.702**, indicating acceptable internal consistency. This suggests that the items included in the tool are moderately homogeneous and measure the underlying construct with reasonable accuracy.

The component matrix indicated that most items showed meaningful loadings across factors, although some items exhibited cross-loadings or weaker factor associations. This reflects the multidimensional nature of the construct being measured. Items with higher loadings contributed more significantly to their respective components, supporting the structural validity of the tool.

Overall, the findings suggest that the tool demonstrates **adequate psychometric properties**, making it suitable for preliminary research and academic use. However, refinement of certain items could further improve their reliability and factorial clarity.

7. LIMITATIONS OF THE SCALE

Although the sample size was large ($N = 400$), the use of non-probability sampling may limit generalizability.

Expert review was conducted but was limited in scope.

The reliability of the tool is acceptable, with scope for further improvement.

Advanced validation techniques (e.g., test-retest, CFA) were not conducted.

8. FUTURE RESEARCH

Future studies can enhance and expand the utility of this tool in several ways:

- **Larger and Diverse Samples:** Replication with larger and more diverse populations to improve generalizability.
- **Refinement of Items:** Revision or removal of weak items to increase reliability and validity.
- **Confirmatory Factor Analysis (CFA):** To validate the factor structure identified in the present study.
- **Test-Retest Reliability:** To assess the temporal stability of the tool over time.
- **Concurrent and Criterion Validity:** Comparison with established tools to strengthen validity evidence.
- **Cross-Cultural Validation:** Testing the tool in different cultural settings for broader applicability.
- **Norm Development:** Establishing norms for different age groups and populations.

9. CONCLUSION

The developed tool demonstrates **acceptable reliability and initial validity**, indicating its potential as a useful measure of the targeted psychological construct. While the findings are promising, further refinement and validation are necessary to enhance their psychometric robustness. With continued development, the tool can serve as a valuable instrument for research and practical applications in psychology.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Bandura, A., & Hall, P. (2018). Albert Bandura and social learning theory. *Learning theories for early years*, 78, 35-36.
- Bartlett, M. S. (1954). A note on the multiplying factors for various χ^2 approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, 296-298.
- Beck, A. T. (1979). *Cognitive therapy and the emotional disorders*. Penguin.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Cronin, L., Allen, J., Ellison, P., Marchant, D., Levy, A., & Harwood, C. (2021). Development and initial validation of the life skills ability scale for higher education students. *Studies in Higher Education*, 46(6), 1011-1024.
- Ellis, A. (1962). Reason and emotion in psychotherapy.
- Erikson, E. (1982). *Psychosocial development*.
- Field, A. (2005). *Discovering Statistics Using SPSS*, Sage Publications Inc.
- Kaiser, H. F. (1974). An index of factorial simplicity. *psychometrika*, 39(1), 31-36.
- Maslow, A. H. (1954). *Motivation and Personality*. Harper & Row, Publishers, Inc. New York.
- Ndirangu, A. N., Wamue-Ngare, G., & Wango, G. (2013). Gender factors in implementation of life skills education in secondary schools in Nairobi, Kenya. *International Journal of education and research*, 1(5), 1-18.
- Nunnally, J., & Bernstein, I. (1994). *Psychometric Theory*, 3rd edition (MacGraw-Hill, New York).
- Pavlov, I. P. (1927). *Conditioned reflexes*: Oxford university press. London, UK [Google Scholar].
- Richard Jessor, P. D. (1991). Risk behaviour in adolescence: A psychosocial framework for understanding and action. *Journal, Of Adolescent Health*, 12, 597-605.
- Rogers, C. R. (1995). *On becoming a person: A therapist's view of psychotherapy*. Houghton Mifflin Harcourt.
- Subasree, R., Nair, A. R., & Ranjan, R. (2014). The Life Skills Assessment Scale: the construction and validation of a new comprehensive scale for measuring Life Skills. *Journal of Humanities and Social Science*, 19(1), 50-58.
- Subasree, R., Nair, A. R., & Ranjan, R. (2014). The Life Skills Assessment Scale: the construction and validation of a new comprehensive scale for measuring Life Skills. *Journal of Humanities and Social Science*, 19(1), 50-58.
- UNICEF, I. (2019). *Comprehensive life skills framework*. New Delhi: UNICEF.

- World Health Organization. (1994). Life skills education for children and adolescents in schools. Pt. 1, Introduction to life skills for psychosocial competence. Pt. 2, Guidelines to facilitate the development and implementation of life skills programmes (No. WHO/MNH/PSF/93.7 A. Rev. 2). World Health Organization.
- World Health Organization. (1997). Life skills education in schools: Programme on mental health. World Health Organization.
- World Health Organization. (2003). Skills for health: Skills-based health education including life skills: An important component of a child-friendly/health-promoting school. World Health Organization.