

# **Life Skills and Yoga as Cutting Edge Mechanisms for Transformative Competencies**

**Srinivaas Ankamreddy<sup>1</sup>, Nallapu Samson Sanjeeva Rao<sup>2</sup>, T.S.R.Sai<sup>3</sup>,**

*1. Asst. Professor, 2. Professor, 3. Professor & Head of Dept.*

*Dept. of Community Medicine, NRI Medical College, Chinakakani, Guntur District, AP state*

## **Abstract:**

**Introduction:** While young people in today's world need a skill set to pursue a meaningful career, they also need a set of psychosocial skills to do well in society. Life skills are psychosocial competencies which allow people to recognize and process emotions and handle everyday issues.

The key life skills identified by the WHO are decision-making, creative thinking, critical thinking, communication, interpersonal skills, self-awareness, empathy, resilience and coping with emotions and stress. The OECD (Organisation for Economic Co-operation and Development) has suggested three "transformative competencies"; Creating new value, Reconciling tensions and dilemmas, and Taking responsibility.

Yoga not only enhances physical stamina and flexibility but also emotional stability, intellectual and creative talents. This study looks at the attainment of life skills and transformative competencies in medical students practicing yoga regularly.

**Objectives:** To identify the core life skills required to help medical students cope with their societal needs and obligations.

To document changes in thought processes brought about by the regular practice of yoga

**Methods:** This study was taken up in the NRI Medical College of Guntur district in the months of October and November 2019 involving 81 female medical students from 6<sup>th</sup> to 9<sup>th</sup> Semesters. A pretested life skills based questionnaire was administered individually after taking an informed consent. Data was entered in MS Excel and presented as percentages in tables. Important findings were subjected to test of significance like Chi square test at 5% Level of Significance.

**Results:** 45.7% of the study subjects were regularly practicing yoga. Overall, interpersonal relationship (84.0%), effective communication (74.1%) and empathy (74.1%) were skills that all the girls acknowledged as having. Agreement in skills like critical thinking (59.3%), creative thinking (70.4%), decision making (67.9%), problem solving (61.7%) and coping with emotions (65.4%) were however lower.

**Discussion:** While many students could not affirm having many core life skills, students practicing yoga regularly, had a more positive outlook. Classifying core life skills arbitrarily under the above three transformative competencies, it is seen that the domain of "creating new value" comprising creative thinking, critical thinking and problem solving are areas which need more inputs in young people.

**Conclusion:** Practicing yoga consistently instills important life skills. Technical and other institutions need to include yoga practice in the curriculum in order to equip students for transformational competencies which will help them to cope with the future.

---

**Introduction:** To deal effectively with the events and challenges of everyday life, one needs life skills. Psychosocial competence is

one's ability to deal effectively with the demands and challenges of everyday life<sup>1</sup>. Frisk E et al suggest that to achieve

sustainable future, individuals have to adopt different values, attitudes, habits, and behaviors. All these often have to be learned at a young age <sup>2</sup>.

The World Health Organization (WHO) in 1999 identified the following key cross-cultural areas of life skills. They are decision-making, creative thinking, critical thinking, communication, interpersonal skills, self-awareness, empathy, resilience and coping with emotions and stress <sup>3,4,5</sup>.

The UNICEF lists psychosocial and interpersonal skills on par with literacy and numeracy skills <sup>6</sup>. UNICEF acknowledges social and emotional life skills identified by the Collaborative for Academic, Social and Emotional Learning (CASEL). It has identified five core groups of social and emotional competencies: Self-awareness, Self-management, Social awareness, Relationship skills and Responsible decision-making <sup>7,8</sup>.

**Yoga practice:** Yoga is a life-science which helps to reduce stress and helps in overall wellbeing. Practicing yoga consistently instills the most basic and important life skills. Some important life skills that Yoga teaches are focus, stillness, self awareness, stress management and the power of breath. In today's world, one is always doing something and cannot be still. Yoga helps us to appreciate silence, stillness and tranquility. The quality of our living and interactions is improved by raised consciousness and self awareness. With slow-deep breaths and focus one learns to manage stressful situations <sup>9</sup>. Yoga and pranayama are probably some of the oldest and time-tested methods to develop focus <sup>10</sup>. Exercises like Drishti Yoga and Trataka Meditation helps one to direct the flow of consciousness onto a specific object <sup>11</sup>. Focus on the task at hand helps us learn to concentrate and makes life more efficient.

The inclusion of Yoga in curricula, not only helps to develop physical strength and suppleness but also emotional stability, intellectual and creative abilities. Regular Yoga practice facilitates the discovery of one's psychological and emotional realm <sup>12</sup>.

**Transformative Competencies:** In a world of uncertainty and rapid change, young people need guidelines to help them navigate towards a brighter future. The Learning Compass 2030 of the OECD (Organisation for Economic Co-operation and Development) is a future-oriented learning framework for students. It is a combined effort by policy makers, researchers, school leaders, teachers, students and others from around the world <sup>13,14</sup>.

Three “transformative competencies” have been identified by the OECD for students to contribute to the world and shape a better future; Creating new value, Reconciling tensions and dilemmas, and Taking responsibility. Students need to acquire all the three transformative competencies to help shape a positive future. To create new value and uncover innovative solutions, students have to ask questions, pool resources and endeavor to think “outside the box”. This brings about a sense of purpose and encourages critical thinking and creativity. In order to balance opposing, complex, confusing needs and demands, students have to develop a sense of empathy and respect. Taking responsibility for their actions will help students develop the necessary capacity and moral compass which will enable honest reflection, team work and respect for the environment <sup>15</sup>.

This study looks at the level of life skills and transformative competencies present in young students and the role of yoga practice in realizing the above.

**Objectives:**

1. To identify the core life skills required to help medical students

cope with their societal needs and obligations.

2. To document changes in thought processes brought about by the regular practice of yoga

**Methods:** This study was taken up in the NRI Medical College of Guntur district of Andhra Pradesh in the months of October and November 2019 involving 81 female medical students from 6<sup>th</sup> to 9<sup>th</sup> semesters. A pretested life skills based self administered questionnaire involving the core life skills as suggested by the WHO was given to students who were practicing yoga and also to those who were not after taking an informed consent from each individual. Data obtained was entered in MS Excel and presented as percentages in tables. Important findings were subjected to test of significance like Chi square test at 5% Level of Significance.

**Results:** The ten life skills included were self-awareness, empathy, creative thinking, critical thinking, decision-making, problem solving, effective communication, interpersonal relationship, coping with stress and coping with emotions. Among the 81 girls who were included in the study, 37 girls were regularly practicing Yoga while 44 were not practicing any Yoga. 68% of those regularly practicing Yoga were in it for “good health” while the rest were interested in weight loss. The sessions were usually around 60 minutes on a daily basis.

The study showed that in general amongst all the study subjects, interpersonal relationship (84.0%), effective communication (74.1%) and empathy (74.1%) were skills that all the girls acknowledged as having. Agreement in skills like critical thinking (59.3%), creative thinking (70.4%), decision making (67.9%), problem solving (61.7%) and coping with emotions (65.4%) were lower.

Table 1 shows the most common positive answered life skills questions in all the

students (both yoga practice and not) which elicited good agreement in all the study subjects while Table 2 shows the questions which most students did not ascribe to. Table 3 shows the difference in life skills between those practicing Yoga and those not practicing. There is statistical significance between those regularly practicing yoga and the others. Table 4 shows the life skills according to transformative competencies suggested above (average numbers of students who acknowledged the given quality in their lives). This also shows statistical significance between those regularly practicing yoga and the others.

**Discussion:** The NRI Medical College has instituted a Yoga programme over the last 2 years with an Assistant Professor in Yoga running it. However, though regular yoga orientation sessions are taken for every batch of students, regular practice is not compulsory or supervised. The results of this study show that students who were practicing yoga regularly had a more positive outlook on the selected life skills and also better interaction with fellow students.

Self-awareness comprises recognition of ‘self’ (character, strengths, weaknesses, desires and dislikes). In this study, many of the girls were clear about identifying their greatest weaknesses and strengths and also had a good self image. However confidence in self, ability to handle change and a realistic assessment of their abilities was not seen in many. Young girls practicing yoga regularly seemed to have an improved self awareness. Self-awareness is a prerequisite for identifying stress, effective communication, interpersonal relations and also developing empathy. Kalaiyaran M et al suggest that self-awareness is a necessary course for the potential of self-growth and development in the young<sup>16</sup>.

Empathy facilitates sharing of experiences and provides an emotional bridge which

enhances pro-social behavior. Many of the girls in this study said that seeing someone treated disrespectfully upset them and that they enjoyed making others happy. However many also said that other's misfortunes did not disturb them and that they were not interested in how others felt. Without empathy, communication with others will be only a one-way process. Empathy will equip one to present thoughts and ideas and tackle delicate issues without offending other people. It will also enable one to elicit support from others and win their understanding<sup>17</sup>.

Critical thinking is an ability to analyze information and experiences in an objective manner. In this study all questions pertaining to critical thinking drew poor responses. There was low level of curiosity, initiative and many girls did not consider themselves as creative. Many girls said that they accept things as they are and do not question them. Lai ER, in a review suggests that critical thinking can contribute to health by helping one to recognize and assess the factors that influence attitudes and behaviour<sup>18</sup>.

Creative thinking helps one look at situations from a fresh perspective. In this study, many girls felt that they were incapable of generating new ideas. Many also felt that when they found that the path taken by them was wrong they were unable to discard and start again. Creative thinking leads to novel or unorthodox solutions. There is evidence that creative learning environments enhances learners' academic achievement, increases confidence and resilience, enhances motivation and engagement, develops social, emotional and thinking skills<sup>19</sup>.

Decision making is a constructive approach to life's choices. It is essential to actively make decisions by assessing available options and the effects these different decisions are likely to have. Decision

making skills traverse all walks of life. A focus on this fundamental skill is essential to any meaningful education<sup>20</sup>. Many girls in this study said that they were unable to take the "best value" decision and also were not able to commit to a decision once taken. However decision making was more positive in those practicing regular yoga.

Significant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain. Practical problem solving skills are highly valued and can be improved with exercising and training<sup>21</sup>. A good number of the girls were not able to appreciate the idea of having a stepwise system to solve problems or the role of intuition in solving problems. They did not see the value of ensuring the commitment of all involved when solving a problem.

In this study most of the girls were content with their interpersonal skills. Interpersonal relationship skills help one to relate positively with people and adds to mental and social well-being. Good communication skills and trusting interpersonal relationships are necessary in any career. These skills apply not only to the patient - doctor relationship, but also to inter-professional relationships and team communications<sup>22</sup>.

Effective communication means that we are able to express ourselves in ways that are appropriate to our cultures and situations. This means being able to express opinions, desires, needs, fears and also being able to ask for advice and help. The responses of some girls in this study revealed poor communication skills especially in keeping messages concise, clear and unambiguous and ensuring grammatically correct language. Effective interpersonal communication contributes significantly to increased employee performance and overall organizational productivity<sup>23</sup>.

Coping with stress means recognizing the sources of stress in our lives, recognizing

how this affects us, and acting in ways that help us control our levels of stress, by changing our environment or lifestyle and learning how to relax. Scientific research has established that stress is the core factor in physical, mental, and emotional disease. Unconscious physical, mental and emotional habits create stress, aging, addiction and disease. Stress is the modern society's illness, as most people will suffer at least short-term distress while they negotiate periods of transition, trauma, challenges and loss <sup>24</sup>. Awareness of stress factors and simple lifestyle changes will help reclaim youthfulness, vitality, joy and well being. In this study many girls said that they were not optimistic about things in their lives and had poor belief in spiritual causes for the happenings in their lives.

Coping with Emotions means recognizing emotions within us and others, being aware of how emotions influence behaviour and being able to respond to emotions appropriately. Intense emotions like anger or sadness can have negative effects on one's health. Developing awareness and making the decision to eliminate negative thinking can be dramatically life changing. In the current study, a significant number of girls said that they walk away from stressful situations and thereby keep them unresolved. Some do not take help from

friends and availing professional help is not an option. An essential component of achieving, restoring, and sustaining psychological well-being is the ability to adapt to the challenges and obstacles of life <sup>25</sup>.

An arbitrary classification of core life skills into transformative competencies shows that the areas of creative thinking, critical thinking and problem solving are deficient in many of the study subjects.

**Conclusion:** Instilling life skills in young people leads to less violent behaviour, better social behaviour, increased ability to plan ahead and choose effective solutions to problems. There is also improved self-image, self-awareness, emotional adjustment, better handling of interpersonal problems and coping with anxiety <sup>26</sup>. Life skills education consisting of basic skills for personal and social development will help young people in coping with the challenges they face <sup>27</sup>.

Yoga helps to de-stress and helps in overall wellbeing. Practicing yoga consistently instills the most basic and important life skills. There is a need for technical institutions to include yoga practice in the curriculum in order to equip students for transformational competencies which will help them to cope with the future.

**Table 1 : Most common positive life skills questions in all the students (both yoga practice and not)**

S. No	Life skill	Affirmative answers	No. (n=81)	%
1	Self awareness	I can list my 3 greatest weaknesses	69	85.2
2	Empathy	It upsets me to see someone treated disrespectfully	71	87.7
		I enjoy making others happy	71	87.7
3	Creative thinking	I am ready to change my ideas if something better comes along	70	86.4
4	Decision making	When making a decision, I am concerned about its purpose	75	92.6
5	Interpersonal relationship	I respect my colleagues and friends	74	91.4
		I make my friends and classmates feel important.	69	85.2
		I stand by my friends at the times of crisis	75	92.6
6	Coping with emotions	I establish healthy boundaries with my friends and others	71	87.7

**Table 2: Lowest ascribed life skills questions - Overall students (both yoga practice and not)**

S. No	Life skill	Affirmative answers	No. (n=81)	%
1	Self Awareness	I am confident about myself	47	58
		I can handle change well	40	49.4
2	Empathy	Other people’s misfortunes disturb me a lot	40	49.4
		I am interested in how others feel	53	65.4
3	Critical thinking	I am curious about everything	45	55.6
		I take the initiative rather than not do anything at all	47	58
		I consider myself creative	36	44.4
4	Creative thinking	I generate new ideas all the time	30	37.0
5	Decision making	I always take the “best value” decision	48	59.3
		Once I make a decision I am committed to it	43	53.1
6	Problem solving	I have a system (steps) to solve problems	43	53.1
		I rely on my intuition to solve problems	45	55.6
		I ensure the commitment of all concerned when solving a problem	44	54.3
7	Coping with stress	I am always optimistic about things	45	55.6
		I believe in a spiritual cause for things happening around me	45	55.6

**Table 3 : Difference in life skills between those practicing Yoga and those not practicing**

S . N o .		Regula r Yoga practic e (n=37)	%	Yoga non practice (n = 44)	%	Chi sq	p value
1	Interpersonal relationship	35	94.6	33	75.0	4.4	0.04 *
2	Empathy	33	89.2	27	61.4	6.7	0.004 **
3	Effective communication	30	81.1	30	68.2	1.1	0.3
4	Creative thinking	34	91.9	23	52.3	13.3	0.0003 ***
5	Coping with stress	31	83.8	26	59.1	5.9	0.02 *
6	Self Awareness	32	86.5	24	54.5	9.6	0.002 **
7	Decision making	31	83.8	24	54.5	7.9	0.005 **
8	Coping with emotion	30	81.1	23	52.3	7.4	0.006 **
9	Problem solving	29	78.4	21	47.7	7.9	0.004 **
10	Critical thinking	27	73.0	21	47.7	5.3	0.02 *

\* significant, \*\* moderately significant, \*\*\* highly significant

**Table 4: Life skills according to Transformative competencies in regular yoga practice**

Transformative competencies		Regular Yoga practice (n=37)	%	Yoga non practice (n = 44)	%	Chi sq	p value
Creating new value	Critical thinking	29	78.4	22	50.0	6.9	0.008**
	Creative thinking						
	Problem solving						
Reconciling tensions and dilemmas	Empathy	31	83.8	26	59.1	5.9	0.01*
	Effective communication						
	Coping with stress						
Taking responsibility	Self Awareness	33	89.2	27	61.4	6.7	0.009**
	Decision making						
	Interpersonal relationship						

\* significant, \*\* moderately significant, \*\*\* highly significant

## References:

1. <https://www.linkedin.com/pulse/life-skills-soft-makes-you-better-vivekanand-nalla-lion-2500->
2. Frisk E, Larson KL, Educating for Sustainability: Competencies & Practices for Transformative Action, *Journal of Sustainability Education*, 2011; 2: 2151-7452, Available at <http://www.jsedimensions.org/wordpress/wp-content/uploads/2011/03/FriskLarson2011.pdf>
3. WHO, 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, 2nd rev. World Health Organization. Division of Mental Health.(1994). Available at: <https://apps.who.int/iris/handle/10665/63552>
4. WHO, Mental Health Promotion, Partners in Life Skills Education Conclusions from a United Nations Inter-Agency Meeting, WHO/MNH/MHP/99.2, Department of Mental Health World Health Organization Geneva, Available at: [https://www.who.int/mental\\_health/media/en/30.pdf](https://www.who.int/mental_health/media/en/30.pdf)
5. Who, Top 10 Life Skills Recommended By The World Health Organization (Who), Available at: <https://hangoutagile.com/do-you-know-the-top-10-life-skills-recommended-by-the-world-health-organization-who-is-that-a-good-idea-to-know-before-you-learn-and-develop/>
6. UNICEF, Global Evaluation of Life Skills Education Programmes Final Report , 2012, United Nations Children's Fund, New York.
7. The CASEL Forum on Educating All Children for Social, Emotional, and Academic Excellence: From Knowledge to Action. Available at: <https://casel.org/wp-content/uploads/2016/01/the-casel-forum.pdf>
8. CASEL , Skills & Competencies, Available at: <https://web.archive.org/web/20110513044119/http://casel.org/why-it-matters/what-is-sel/skills-competencies/>
9. 5 Life skills Yoga teaches, Available at <http://total-yoga.org/5-life-skills-that-yoga-teaches/>
10. <https://www.artofliving.org/in-en/yoga/yoga-benefits/get-focus-with-yoga>
11. Giovanni, Trataka Meditation: Still Eyes, Still Mind, <https://liveanddare.com/trataka/>
12. Folleto JC, Pereira K R, Valentini NC, The effects of yoga practice in school physical education on children's motor abilities and social behavior. *International journal of yoga*,2016; 9(2), 156–162.
13. OECD Future of and Skills 2030 OECD Learning Compass 2030 A Series of Concept Notes, [http://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/OECD\\_Learning\\_Compass\\_2030\\_Concept\\_Note\\_Series.pdf](http://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/OECD_Learning_Compass_2030_Concept_Note_Series.pdf)
14. OECD Future of Education and Skills 2030, <http://www.oecd.org/education/2030-project/>
15. [https://www.oecd.org/education/2030-project/teaching-and-learning/learning/transformational-competencies/in\\_brief\\_Transformative\\_Competencies.pdf](https://www.oecd.org/education/2030-project/teaching-and-learning/learning/transformational-competencies/in_brief_Transformative_Competencies.pdf)

16. Kalaiyaran M, Solomon MD, Importance of Self-Awareness in Adolescence – A Thematic Research Paper IOSR Journal of Humanities and Social Science (IOSR-JHSS), 2016; 21 (1): 19-22.
17. Riess H. The Science of Empathy. *J Patient Exp.* 2017 Jun;4(2):74-77.
18. Lai ER , Critical Thinking: A Literature Review Research Report, 2011 Available at <https://images.pearsonassessments.com/images/tmrs/CriticalThinkingReviewFINAL.pdf>
19. Davies D, Jindal-Snape D, Collier C, Digby R, Hay P, Howe A, Creative learning environments in education—A systematic literature review, *Thinking Skills and Creativity*, 2013; 8: 80-91
20. Building key decision making skills, <https://www.decision-making-solutions.com/decision-making-skills.html>
21. Chaudhry NG, Rasool G, A Case Study on Improving Problem Solving Skills of Undergraduate Computer Science Students, *World Applied Sciences Journal*, 2012; 20 (1): 34-39.
22. Chambers M. Interpersonal relationships and communication as a gateway to patient and public involvement and engagement. *Health Expect.* 2018 Apr;21(2):407-408. doi: 10.1111/hex.12683. PMID: 29577544; PMCID: PMC5867316
23. Okoro E, Washington MC, Thomas O, The Impact of Interpersonal Communication Skills on Organizational Effectiveness and Social Self-Efficacy: A Synthesis, *International Journal of Language and Linguistics*, 2017; 4 (3): 28 – 31.
24. Baqutayan SSM, Stress and Coping Mechanisms: A Historical Overview, *Mediterranean Journal of Social Sciences*, 2015; 6(2): 479
25. Marroquín B, Tennen H, Stanton AL, Chapter 14 - Coping, Emotion Regulation, and Well-Being: Intrapersonal and Interpersonal Processes, *The Happy Mind: Cognitive Contributions to Well-Being*, 2017, Springer International Publishing, M.D. Robinson, M. Eid (eds.), pp 253- 274.
26. Aishath N, Abdullah HB, Krauss SE, Ahmed NB, A narrative systematic review of life skills education: effectiveness, research gaps and priorities, *International Journal of Adolescence and Youth*, 2019; 24 (3): 362-379.
27. Aishath N. (2008). Life Skills Education for young people: Coping with Challenges. *Counselling, Psychotherapy, and Health*, 2008; 4(1), *Counselling in the Asia Pacific Rim: A Coming Together of Neighbours Special Issue*, 19-25.