



## Future of Critical Thinking and Creativity in Social Work Education

Jesly Jacob<sup>1</sup> Jose Antony<sup>2</sup> Vivek Kumaran<sup>3</sup>

**ABSTRACT:** Critical thinking and creativity are two higher-order thinking. In old literature, critical thinking and creativity were considered two independent types of thinking. Nevertheless, the latest research and literature emphasize the complementary nature of critical thinking and creativity. Creativity and Critical thinking have been recognized as life skills and skills of the 21st century. Critical thinking is considered one of the core competencies of the social work profession. The nature of the world is very dynamic, and Social Work professionals' critical thinking and creativity will help them contribute to society's development. The core idea in this paper is the necessity of critical thinking by a social worker to make creative solutions. An innovative idea by a social worker is useful when that idea is suitable to the environment of the problem, and such innovations need critical thinking. A social worker encounters unique problems of individual, group and community. Problems encountered by the social worker may seem similar, but all problems are unique. Unique problems require unique solutions. Critical thinking of the problem is the foremost step to making unique solutions. Critical thinking and creativity depend on the environment of the person. Social work education has a great role in making social work professionals think critically and creatively to make them capable of changing the world.

**Keywords:** critical thinking, creativity, social work education, social worker, creative solutions



©2022 This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

International agencies UNESCO and OECD have identified critical thinking and creativity as competencies of the 21<sup>st</sup> century. The ten life skills the World Health Organisation proposed include critical thinking and creativity. Critical thinking is also a core competency of the social work profession, as mentioned by the Council of Social Work Education. The labels mentioned above for creativity and critical thinking by various international organization is evidence of the relevance of creativity and critical thinking in today's world. The complementary nature of critical thinking and creativity makes them mutually dependent to be productive.

---

<sup>1-3</sup> Department of Social Work, Sree Sankaracharya University of Sanskrit, Kalady, India

Both these skills are essential for all methods of social work practice. Various literatures have explained the importance of creativity and critical thinking in the social work profession. This paper highlights the complementary nature of creativity and critical thinking in the social work profession. Creating numerous innovative solutions is creativity, but making a solution requires critical thinking. Solution-making is creativity only when it is useful. The solution's usefulness is made through critical thinking of all possible solutions. Training students in social work education to enhance their creativity and critical thinking will help them to lead a productive, personal and professional life.

### **Explaining Critical Thinking and Creativity**

There are various theoretical definitions available for creativity. The definition by the American Psychological Association was found to be the most comprehensive and latest one. American Psychological Association's Dictionary of Psychology (2020) defines creativity as "the ability to produce or develop original work, theories, techniques, or thoughts. A creative individual typically displays originality, imagination, and expressiveness. Analyses have failed to ascertain why one individual is more creative than another, but creativity does appear to be a very durable trait." From the above definition, it is clear that creativity is the long-lasting ability of an individual to make an original product.

Various factors play behind an individual's creativity, like personality, motivation, and intelligence (Kaufman & Sternberg, 2007). R Keith Sawyer, 2006 pointed out the importance of sociocultural factors behind interpreting creative behaviour (as cited in Kaufman & Sternberg, 2007). A solution to a problem is new and viable when related to its social and cultural aspects. An idea or product considered creative in the Asian context may be a traditional idea in the European context, as these two geographic divisions have their own distinct nature in their sociocultural aspects. The conception of creativity varies with cultures (Kaufman & Sternberg, 2007). personality traits, intrinsic and extrinsic motivation, sociocultural factors and environment influence an individual's creativity in a given situation.

The following are characteristics possessed by creative individuals: 1) Creative individuals are ready to sell their ideas, and they realize that there will be blocks in their path, 2) Creative persons are willing to go for sensible risks; 3) Creative people recognize that creativity is not about doing something once, but about creativity is developed throughout life 4) they continuously challenge themselves to do far better ideas and to view things in novel perspectives (Kaufman &

Sternberg, 2007).

Kivunja (2015) defined critical thinking skill "as an individual's ability to use a number of his or her general cognitive processing skills which fall into high-order thinking levels of analyzing, evaluating and constructing new ideas or creating and which enables students to think deeply to solve non-familiar problems in a different way" (as cited in Erdogan 2019). another definition for critical thinking by the University of Sydney, 2014, is "a process that challenges an individual to use reflective, reasonable, rational thinking to gather, interpret and evaluate information to derive a judgment" (as cited in Erdogan 2019).

Edi, 2012 mentioned that observation, identifying patterns, having different perspectives on the obtained information, selecting a solution with rationality and understanding the consequences of the chosen solution are activities involved in critical thinking processes ( as cited in Solmeto, 2017). In critical thinking-related activities, generating information, verifying information, analysis and evaluation are involved. All these are part of a good thinking process. Critical thinking makes individuals capable of learning, an individual's active process to find ideas, facts, and theories (Njiraini, 2016). Through learning, critical thinking helps to review the motivation, self-efficacy, and attitude of individuals towards the learning process (Njiraini, 2016)

Immanuel Kant belongs to the time of the European Enlightenment. Arguments towards critical thinking have existed from old times onwards. Immanuel Kant described that liberation is through critical thinking, and why we believe and what we believe is understood by critical thinking(Njiraini, 2016). Critical thinking cannot be considered a perfect way to free man from the "Immaturity" concept of Immanuel Kant, but critical thinking can help an individual know what is needed by one (Njiraini, 2016).

Critical thinking, experiential learning and critical being are two concepts of importance. Dewey, Piaget, and Kolb in 1984 developed a model of experiential learning to improve critical thinking skills based on experience, reflection on experience, forming abstracts from reflection, and testing of concepts (Njiraini, 2016). The experiential learning model is useful for improving students' critical thinking ability. The concept of critical being is a concept that considers thinking and acting critically as an approach to life rather than a skill (Njiraini, 2016). This concept includes critical reflection, critical self-evaluation, and critical action, and it explains the ability of individuals to critically engage with the world through self-critique (Njiraini, 2016). Experiential learning is

also useful to make an individual a critical being.

### **Relating Critical Thinking and Creativity**

Critical thinking and creativity can be related to each other in conceptual and empirical aspects (Wechsler et al., 2018). Lipman, 2003 explains the intrinsic connection between creativity and critical thinking as there are stages of generating creative solutions and stages of evaluation and decision-making in the thinking process (as cited in Wechsler et al., 2018). Parnes, 2000 stated that creativity and critical thinking are present at various stages of creative problem-solving (as cited in Wechsler et al., 2018). Halpern (2006) explained the complementary nature of creativity and critical thinking and claimed that the chances vary based on the methods used to train these skills (as cited in Wechsler et al., 2018). Mumford et al., 2012, explained knowledge and mental modes as factors that affect the nature of creative problem-solving by people (Wechsler et al., 2018).

Gibbon and Gray, in 2002, explained the interrelation between creativity and critical thinking. They emphasize that when students think critically, they are directing thoughts towards innovative routes to problem-solving, which is absolute creativity (Gibbons & Gray, 2004). Most definitions of creativity contain three common ideas: the first one is innovative, the second one is high quality, and the third one is appropriateness (Kaufman and Sternberg 2007). Among three common factors, innovation is making something new or non-conventional. Thinking out of the box or breaking usual norms lies within innovation. If innovation has to happen, there should be a need or problem. Understanding all aspects of a need or problem leads to innovation, and that is critical thinking. The definition's second and third common factors are high quality and appropriateness, respectively. For making a solution with quality and appropriateness also needs critical thinking about the problem. So, the definition of creativity itself indirectly explains the need for critical thinking to be creative.

In the idea of complementary relation between creativity and critical thinking, Brookfield 1987, has identified certain characteristics or abilities for critical thinking, they are not sticking to the traditional way of problem-solving, interest towards related as well as divergent fields, different viewpoints on a problem, relative as well as contextual perspectives towards the world, regularly applying trial and error approach to find the feasibility of alternate solutions, orientation towards future, optimistic affiliation towards change, self-confidence and belief in judgment

qualities of self (as cited in Gibbons & Gray, 2004).

Merriam and Caffarella, (1999) explained that in critical thinking, a learner can construct innovative ideas and concepts and also support the learner's attempts to understand their environment beyond the immediate relations (as cited in Njiraini, 2016). Parnes, in 1967, explained that In Osborn-Parnes's creative problem-solving model, five stages are involved. They are fact-finding, problem clarification, idea-finding, solution generation, and acceptance finding (as cited in Wechsler et al., 2018). Isaksen and Treffinger called the first two stages mess finding and data finding, respectively (as cited in Wechsler et al., 2018). Grohman et al. (2006) emphasize that problem-solving involves creating ideas using creative thinking and evaluating and implementing ideas that use critical thinking (as cited in Wechsler et al., 2018). Lubart, 2001 explained that after the illumination phase of creativity, in which new ideas appear, there is a verification stage at which ideas are analyzed with a critical perspective (as cited in Wechsler et al., 2018).

Some studies, like Amabile (1996), have emphasized the internal environment, like the intrinsic motivation of the individual for being creative (Kaufman & Sternberg, 2007). The intrinsic motivation of an individual is necessary for any kind of learning. Intrinsic motivation is necessary for an individual to be a critical thinker (Leone et al., 2015). So, intrinsic motivation is a common requirement for an individual to be creative and critical.

### **Critical Thinking and Creativity for Dynamic World**

Creativity and Critical thinking are important in today's world as both are considered future competencies by many international agencies. The Partnership for 21st Century Skills proposed collaboration, communication, creativity, and critical thinking skills as the major learning and innovation skills of the 21st Century (Erdogan 2019). Collaboration, communication, creativity, and critical thinking are foundational stones for success in education, career, and life, so these skills must be focused on preparing students for the future (Erdogan 2019). Collaboration, communication, creativity, and critical thinking are required to excel in the social work profession because of the nature of social work practice.

J. Paul Guilford's presidential address at the meeting of the American Psychological Association, which emphasized the need for research on creativity, stimulated creativity research (Kaufman and Sternberg 2007). Creativity has a great role in determining the world's future, as the world is constantly changing. As a result of efforts made nationally and internationally,

creativity will be at the forefront of research and practice (Kaufman & Sternberg, 2007). researching creativity will contribute to the existing knowledge of creativity, and this knowledge base is essential for applying creativity in practical situations. Any practice without theoretical evidence is baseless, and theoretical knowledge without application is useless.

Critical thinking and creativity are required to create new values (OECD, 2019). 2015 innovation strategy of the OECD explained the importance of creativity as a driver of socio-economic growth and development, which can address global challenges, including demographic shifts, climate change, and resource scarcity (OECD, 2019). Students must have a sense of purpose, an open mindset, and curiosity towards new perspectives, ideas, and experiences. United Nations Educational, Scientific and Cultural Organisation, 2016 considers creativity and critical thinking as major transversal competencies that have to be developed during higher education (as cited in Wechsler et al., 2018). The time of higher education equips the students to get a deeper understanding of their subject and hence to take vocational roles in their domain. A deeper understanding of the subject is essential to think critically to make creative products.

The result of the studies conducted by the United Nations Educational, Scientific and Cultural Organization in 2016 and the Organization of Educational and Economic Development OECD in 2009 have pointed out that creativity, critical thinking, problem-solving, and decision-making are the important competencies that to be developed by the existing system (Wechsler et al., 2018). All the systems around an individual, including family, peer group, educational institution, relationships, and workplace, have a role in developing an individual's competencies. All these systems constitute the environment of the individual where the competencies of creativity and critical thinking start to develop and reach the peak level. Following the criticism of employers and recent societal developments, policymakers and educators have raised the need for students to develop generic skills like critical thinking (Shavelson et al., 2019). Employers are the end users of competencies developed by individuals in the career aspect, and Individuals themselves are the end users of competencies in the life productivity aspect. Stages of an individual prior to reaching employment have a great role in contributing to the competencies, and higher education is the most important among them.

### **Critical Thinking and Creativity in Social Work**

Competence is seen as a person's potential ability or capacity to perform a task in a given situation. Woodruffe (1993) defined competence as: "A work-related concept which refers to areas

of work at which the person is competent. Competent people at work are those who meet their performance expectations." required competencies vary with the profession. In social work, professional competence can be treated as a set of knowledge and abilities required by an individual to practice the profession in the best possible way. Council of Social Work Education has included critical thinking in the list of core competencies required by the social work profession.

International Federation of Social Workers (2014) provided a global definition for social work as follows: "Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversity are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to address life challenges and enhance well-being. The above definition may be amplified at national and regional levels." All aspects of the social work profession are included in the above definition. Critical thinking is a core competency to fulfil all criteria mentioned in the definition. Critically thinking social workers can provide creative solutions to the problems that arise in social work as a practice-based or academic field.

Considering the primary and secondary methods of social work, the social worker requires all the characteristics required by a person with critical thinking. A social worker has to use critical thinking skills to evaluate an individual's problem, understand the individual's environment, explore all possible solutions for a particular problem, and choose the best possible solution for a problem. Creativity is also embedded in the social work process to identify all possible solutions. Even if the category of problem is the same, the person and environment of that person make every problem unique, which highly requires creativity on the part of the social worker. As social work needs much research to contribute to its body of knowledge, creative thinking will bring new knowledge under the light of research and contribute towards evidence-based practice in social work. The creativity of the social worker is also tied to forming and testing hypotheses in studies, which helps to give support to evidence-based practices (Jackson & Burgess, 2005).

Social workers are expected to practice the profession and be free of personal prejudices and biases (Jackson & Burgess, 2005). A social worker should have rational judgment rather than personal judgment. Critical thinking is necessary to make rational judgements and decisions. A person with critical thinking skills approaches a situation, question, issue, or problem with a

judgemental mindset, thinks about its positive and negative aspects, explores all possible ways to deal with it, enlist all strengths and limitations of each option in the context of that particular situation (Gibbons & Gray, 2004).

Seymour et al., 2003 stressed the requirement of creativity and critical thinking, often combined in professions that deal with problem-solving situations (as cited in Wechsler et al., 2018). Social workers enable people to cope with various types of issues like sickness, solitude, financial crisis, psychological trauma, and discrimination. Social work practitioners have to make hard decisions, and they are required to intervene to improve the lives of people. (Jackson & Burgess, 2005). When a social worker deals with a child abuse case in a single day, the characteristics of two problems and the solution for two problems are entirely different in all aspects, even if the problem is the same. Social workers' critical thinking ability enables them to create a creative solutions for clients. All work of a social worker is individual-centred, so creative solutions are required to meet the demands of the individual.

Social workers deal with diverse problems and work in a team that includes professionals from different disciplines (Jackson & Burgess, 2005). In any area of social work like hospital, school, deaddiction, children in conflict with the law, and marital issues, a social worker performs his duty as a team of professionals from other fields. Social workers' critical thinking and creativity have a role in making an identity for social workers in the working team. A social worker's commitment to the profession and openness are highly required qualities (Jackson & Burgess, 2005). Problem-solving is a major skill social work professionals require, as they come with problems of individuals, groups, and communities throughout their practice. As mentioned by Hong and Choi, 2015, professions like designing critical thinking demonstrate through reflection and flexibility to facilitate problem-solving (as cited in Wechsler et al., 2018).

Primary sources of creative thinking and creativity of social workers are problems of the real world and the challenges encountered by the social worker as a part of their everyday life (Jackson & Burgess, 2005). In social work, creativity is another name for finding new ways to work with divergent classes of people as well as conditions (Jackson & Burgess, 2005). Social workers' creativity emerges from their social interaction with the working conditions (Jackson & Burgess, 2005). The chance to improve their lives is a major motivation for social workers to become creative (Jackson & Burgess, 2005). Social workers' creativity aims to improve the psycho-social living situation of people (Jackson & Burgess, 2005). People and their environment are highly



divergent, for which social work practice cannot be defined through certain guidelines or procedures (Jackson & Burgess, 2005). A major part of the creativity of social workers is pointed towards mediating and resolving critical social issues that develop from divergent and challenging situations (Jackson & Burgess, 2005). Social workers can become a source of creative ideas (Jackson & Burgess, 2005).

Understanding an individual's problem is key in social work practice, and communication is the most important tool. Social workers are meant to communicate with different kinds of people, this communication process is a major domain of creativity of social workers (Jackson & Burgess, 2005). Thoughtful and empathetic communication in the earlier phases of problem-solving aimed at building up the background information necessary for problem-solving (Jackson & Burgess, 2005). Being empathetic means understanding a person's issues by standing in their shoes. Critical thinking is very much needed for exhibiting the quality of empathy, as being empathetic means the problem is understood and evaluated from all aspects.

The client's engagement with the social worker depends on attitude, behaviour, experience, self-feeling, and how to respond to clients' questions (Jackson & Burgess, 2005). So, the creativity of social workers has a great role in creating the best environment for clients to vent their stories, to be heard, and to understand the story by people who can resolve the problem (Jackson & Burgess, 2005). A good environment to ventilate emotions and reveal their problem and situations is necessary for successful problem-solving.

When a new and complex problem comes in front of a social worker, evidence or a model to find a solution may be incomplete (Jackson & Burgess, 2005). In such a situation, convergent thinking is needed, but divergent thinking out of the box is also necessary to explore all available possibilities (Jackson & Burgess, 2005). Creativity involves making maximum new possibilities, and critical thinking involves being creative and evaluating the most appropriate possibility in a given situation.

Since social work is an enabling profession, social workers need critical thinking and creative thinking to practise their profession with any target group. The strength of any profession is the body of knowledge of the profession. Critically thinking social workers can make creative research questions to facilitate knowledge production, verification and application. All research-produced knowledge will contribute to the evidence-based practice of the social work profession.

### **Critical Thinking and Creativity in Social Work Education**

India's latest national education policy (2020) focuses on cultivating creativity and critical thinking as its basic principle from school-level education to higher education levels to equip students with problem-solving and decision-making skills. Educational policy is a guideline provided by the country to plan and implement various educational programs from the school level to the higher education level to achieve the aims and objectives of the educational programme. Experiential learning at all levels of education is also emphasized in India's National Educational Policy of 2020. Experiential learning is a good way to train critical thinking abilities.

Teachers who try to nurture creativity among students are often labelled as an idealist and missing the big picture, but in contradiction to this creativity can make valuable changes in classrooms (Kaufman and Sternberg 2007). Those teachers who promote creativity and critical thinking of the students are an asset to higher education, equipping the students for their lives and careers. To promote students' creativity, social work educators identify a wide variety of methods of teaching (Jackson & Burgess, 2005). Methods that involve active learning promote creativity (Jackson & Burgess, 2005). Methods that promote creative thinking require facilitative teaching (Jackson & Burgess, 2005). Experiential learning that promotes critical thinking, which Dewey proposed, is a type of active learning. Dewey and Freire have found the link between experiential learning and critical thinking (Gibbons & Gray, 2004). Freire, 1994 mentioned that learning from experience is required to happen in the background of good critical thinking skills, and he also described that teachers with the competency of critical thinking are necessary to stimulate students to take the large amount of risk to be creative in the curiosity to learn (as cited in Gibbons & Gray, 2004). This connection ensures the link between creativity and critical thinking in social work education. Fairweather and Cramond (2010) proposed the need for classrooms that promote creativity to be critical (as cited in Wechsler et al., 2018).

Phan, in 2010, noted that Critical thinking is necessary to plan, manage, monitor, and assess tasks in higher education(as cited in Wechsler et al., 2018). Critical thinking works in the classroom and in children's personal and social lives (Wechsler et al., 2018). Butler 2010, also agrees with this by proving that students with higher-level critical thinking have fewer negative outcomes in day-to-day life (as cited in Wechsler et al., 2018). Information about creativity and critical thinking which is important for educators was explained by Baker et al., 2001 (as cited in Wechsler et al., 2018). Baker emphasized that educators can promote students' problem-solving

ability in various contexts only if they understand the relationship between creativity and critical thinking (as cited in Wechsler et al., 2018).

Robert W. Weisberg, in 2006, stated that the process of thinking by an average person when they are creative is the same as the process used by geniuses, which implies that the final product of thinking is not remembered by history, but all individuals can become creative (Kaufman & Sternberg, 2007). All individuals can become creative, which is a support that emphasizes the need for creativity training because creativity training will transform potential creativity into functional creativity. Creative thinking skills will equip the students to think beyond conventionalities, imagine new solutions, and produce marvellous work, as most fast-growing industries depend on workers' creative potential (Erdogan, 2019).

Directly teaching creativity is not possible, but anyone can teach for creativity, that is, promoting students' creativity by the application of reward as well as reinforcement (Kaufman & Sternberg, 2007). This indicates that social work educators can use different types of reinforcement and rewards to motivate students' creativity; otherwise, research evidence shows that students' creativity tends to decline. A social work educator must have good knowledge about creativity to recognize creativity. Including the theoretical aspect of creativity in the curriculum will enable students and educators in the social work discipline to identify and promote creativity. A teacher with inadequate knowledge of creativity will not be able to identify or promote creative behaviours or ideas of student social workers.

Neuman & Blundo, in 2000, pointed out that there should be an encouragement for social work students to recognize and consider the way through which they see the outside world has an impact on their clients and work (as cited in Gibbons & Gray, 2004). Critical thinking is essential to take social work students from mere knowledge acquisition to critical examination and engagement with various issues in the social work profession (Gibbons & Gray, 2004). Experiential learning has helped social work students develop their perceived critical thinking skills, creativity, and lateral thinking as major strengths in their profession (Gibbons & Gray, 2004).

A person with critical thinking skills can recognize that there is learning from every situation, and the opportunity to learn from different situations acts as a platform to reflect and identify ways to overcome that issue (Njiraini, 2016). Critical thinking can potentially transform a learner's perspective of life in general (Njiraini, 2016). Perspective towards life is very important

for a social work trainee. Because social workers are meant to work with diverse and marginalized people. Critical thinking of a social worker influences the ability to accept each client as they are.

One factor that determines the development of critical thinking in students is the training received by their teachers (Slameto, 2017). Social Work educators should undergo continuous training programmes to sharpen their abilities to train students in creativity and critical thinking. Social work education is the process by which social work educators and social work practitioners are formed. So, quality training received by social work students not only makes good social workers but also good social work educators. Teacher's behaviours that develop students' critical thinking capacity were rare in social care programmes (Pithers & Soden, 2000). Such research evidence emphasizes the need for continuous training and evaluation of social work educators.

Unnecessary mistakes that occur from a lack of informed decisions can be avoided by critical thinking (Njiraini, 2016). A decision taken by the social worker or a decision taken by an individual with the help of a social worker is a reflection of training received by the social worker. Training the social worker in critical thinking helps them excel in decision-making. There is no evidence to prove that critical thinking skills lead to happiness or success, but avoiding choices that lead to unnecessary difficulties and dependence on others is very much needed. (Njiraini, 2016). Skills of Critical Thinking and problem solving make students capable of judging and evaluating the accuracy as well as the value of information, and making purposeful decisions and actions based on the evaluation (Erdogan 2019).

As social work is an enabling profession that helps the individual to help themselves, critical thinking is necessary for a social worker to enable his client. A social worker does not unquestioningly believe the verbatim of a client or community but rethinks it based on the gathered evidence to improve the situation of the client or, group or community. A critical being does not directly accept knowledge as well as a situation but, based on the gathered evidence, rethinks to improve the current situation(Njiraini, 2016).

As a central part of skills and competencies, critical thinking must be acquired and updated, enabling people to adapt to societal changes and participate actively in all domains of socio-economic life, hence taking more power to control their future (Njiraini, 2016). Social workers are highly demanded to adapt to changing situations in society. So critical thinking should be considered as a core element of all skills and competence of a social worker. When society

changes from time to time, the issues of people and society will also change. The Council of Social Work Education recognized critical thinking as a core competency.

The relationship between a creative person and his environment is studied by the system model of Csikszentmihalyi (1996), and he explains creativity as the interaction between domain, field, and the individual (Kaufman & Sternberg, 2007). Good subject knowledge is essential for a person to become creative. A social work curriculum should be designed so that after completing that curriculum, the individual acquires a good amount of subject knowledge. Assessment of subject knowledge should not be questions that assess theoretical knowledge, but the question should challenge the individual to think critically based on the theoretical knowledge. When we refer to the environment, factors like reinforcement, the attitude of teachers, and teaching-learning activities are included to make the environment suitable to nurture creativity.

If students leave their educational institution without being aware of the competencies and skills required by the 21st century, they will be treated as underprepared for the dynamic challenges in society and the work environment (Erdogan 2019). Social Work educators are highly responsive to society and the world to promote the problem-solving ability of future social workers by understanding the relationships between creativity and critical thinking. Workshops on creativity and critical thinking for social work educators will make the learning environment of social work students more suitable for creativity and critical thinking. Even if creativity and critical thinking are considered concepts of psychology, research on these topics in the social work context should be encouraged to make evidence-based practices in social work. A better understanding of these two types of thought processes by social work educators is needed as the world considers critical thinking and creativity core competencies of the 21st century.

The ways to promote creativity and critical thinking in social work education to make social work professionals competent for the current century are the following:

1. Promoting research in the field of creativity and critical thinking in the social work context
2. Continuing education for practising social workers with a special focus on creativity and critical thinking
3. Continuous training and assessment for social work students by giving more attention to creativity and critical thinking

4. Restructuring of social work curriculum, fieldwork practices and evaluation to give more emphasis on critical thinking and creativity
5. Making social work classrooms more supportive of creativity and critical thinking
6. Application of social work methods for social work students to develop creativity and critical thinking

### Conclusion

Creativity and Critical thinking are two high-order thinking which are complementary to each other. Various international agencies, including the World Health Organisation, UNESCO and OECD, recognize creativity and critical thinking. Professionals have to develop critical thinking and creativity to prepare for the needs of the current century. Since problem-solving and decision-making are important functions of social work practice, creativity and critical thinking are mandatory for excelling in the social work profession. Promoting research and training on creativity and critical thinking in social work education and social work practice is the way to make social work professionals competent for this century.

### References

- American Psychological Association (2020). APA dictionary of psychology. 750 First St. NE, Washington, DC 20002-4242
- Erdođan, V. (2019). Integrating 4C skills of the 21st century into 4 language skills in EFL classes. *International Journal of Education and Research*, 7(11), 113-124.
- Gibbons, J., & Gray, M. (2004). Critical thinking is integral to social work practice. *Journal of teaching in social work*, 24(1-2), 19-38.
- Jackson, N., & Burgess, H. (2005). Creativity in social work and social work education. [https://www.creativeacademic.UK/uploads/1/3/5/4/13542890/creativity\\_in\\_social\\_work](https://www.creativeacademic.UK/uploads/1/3/5/4/13542890/creativity_in_social_work).
- Kaufman, J. C., & Sternberg, R. J. (2007). Creativity. *Change: The Magazine of Higher Learning*, 39(4), 55-60.
- León, J., Núñez, J. L., Ruiz-Alfonso, Z., & Bordón, B. (2015). Music Academic Performance: Effect of Intrinsic Motivation and Critical Thinking//Rendimiento académico en Música: efecto de la motivación intrínseca y el pensamiento crítico. *Revista de Psicodidáctica*, 20(2).
- National Educational Policy. (2020). Ministry of Human Resource Development. Government of India

- Njiraini, N. (2016). Critical thinking as a core competence for the future. *AED–Adult Education and Development Editorial Mint tea in the garden*, 94.
- OECD (2019). OECD Future of Education and Skills 2030. Conceptual Learning Framework. Concept Note: Transformative Competencies for 2030.  
[http://www.oecd.org/education/2030-project/teaching-and-learning/learning/transformativecompetencies/Transformative\\_Competencies\\_for\\_2030\\_concept\\_note.pdf](http://www.oecd.org/education/2030-project/teaching-and-learning/learning/transformativecompetencies/Transformative_Competencies_for_2030_concept_note.pdf)
- Pithers, R. T., & Soden, R. (2000). Critical thinking in education: A review. *Educational research*, 42(3), 237-249.
- Shavelson, R. J., Zlatkin-Troitschanskaia, O., Beck, K., Schmidt, S., & Marino, J. P. (2019). Assessment of university students' critical thinking: Next-generation performance assessment. *International Journal of Testing*, 19(4), 337-362.
- Slameto, S. (2017). Critical thinking and its affecting factors. *Jurnal Penelitian Humaniora*, 18(2), 1-11.
- Wechsler, S. M., Saiz, C., Rivas, S. F., Vendramini, C. M. M., Almeida, L. S., Mundim, M. C., & Franco, A. (2018). Creative and critical thinking: Independent or overlapping components? *Thinking Skills and Creativity*, 27, 114-122.
- Woodruffe, C. (1993). Assessment Centres: identifying and developing competences Retrieved from [www.eyrolles.com/.../Chap-1\\_Levy-Leboyer.pdf](http://www.eyrolles.com/.../Chap-1_Levy-Leboyer.pdf) on 18/10/2014.