EFFECT OF LIFE SKILLS ON SOCIAL INTELLIGENCE AND ICT COMPETENCIES OF STUDENT TEACHERS OF MIZORAM

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CERTIFICATE

This is to certify that **Malsawmtluangi Vanchhawng, Ph. D Scholar, Department of Education, Mizoram University, Registration No.MZU/Ph.D/961 of 26.05.2017,** has written her thesis entitled **'Effect of Life Skills on Social Intelligence and ICT Competencies of Student Teachers of Mizoram',** under my guidance and supervision. In preparing the thesis, Malsawmtluangi Vanchhawng has complied with all the requirements as laid down in the Ph. D Regulation of the University. The thesis is the original work of the scholar and has not been submitted for any degree to any other Universities.

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DECLARATION

I, Malsawmtluangi Vanchhawng, hereby declare that the subject matter of the thesis entitled 'Effect of Life Skills on Social Intelligence and ICT Competencies of Student Teachers of Mizoram', is a record of work done by me, that the content of this thesis did not form basis of the award of any previous degree to me, or to the best of my knowledge, to nobody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This thesis is being submitted to the Mizoram University, Aizawl, for the award of Master of Philosophy in Education.

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INTRODUCTION

1.0. Introduction

Teachers must adopt creative attitudes, be adaptable in their techniques, and stay current on developments in their field of study in order to be considered professional. Additionally, they should be able to recognise the value of human potential, discern the different needs of the pupils and foster a climate that is conducive to learning. How adept at using ICT, social intelligence, and life skills the teachers are will have an immense impact on how productive and successful his or her students turn out. Teachers are efficient and effective in the teaching profession when they are skilled in problem-solving methods, critical thinking abilities, interpersonal and social relationships, managerial abilities, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication methods. Lacking social intelligence and life skills can make teachers feel inadequate in their job, sad, and unable to manage challenging situations or establish a professional network. The teacher, students, and overall educational process and institution may experience a number of problems due to students' lack of fundamental life skills and inadequate ICT or digital abilities. Learning new ways of thinking and problem-solving, recognising the effects of their actions, and teaching students to take responsibility for their actions rather than placing blame elsewhere are just a few of the benefits that come from developing good life skills. They also help students and teachers gain confidence in their ability to speak and communicate, work cooperatively in groups, analyse options, make decisions, and understand why they make certain decisions outside of the classroom, which leads to a greater sense of self-awareness.

Coordination among teachers, critical and creative thinking, effective communication, interpersonal contact, and competence in management are all important factors that impact student’s achievement. It is well known that humans are social beings. This suggests that we all need to be socially aware, at least to some extent, in order to manage our own well-being and foster good interpersonal

interactions as well as relationships with the younger generation which is certainly relevant for teachers. In order to successfully manage students and a classroom, teachers must possess a variety of skills. These include interpersonal relationship skills, effective communication, conflict resolution, coping with stress and emotion, empathy, cooperation skills, and empathy. This leads to enhanced student engagement and learning. The social, intellectual, and emotional well-being of the pupils is reflected in the social intelligence of the teacher.

Information and communication technology (ICT) has had a significant impact on improving education quality by enabling learner-centred pedagogy in place of the more conventional teacher-centred pedagogy. Better teaching-learning can be facilitated by a broader range of the finest educational practices and resources, which can be shared and accessed through ICT. ICT provides an opportunity for educational institutions to connect with remote populations and open up new global educational markets. ICT has the capacity to eliminate the obstacles that have been contributing to low literacy rates worldwide. ICT can be used as a tool to overcome the issues of cost, low number of teachers, poor quality education, as well as time and distance barriers (Mc Gorry, 2002). The use of ICT creates a powerful learning environment and transforms the learning and teaching process in which students deal with knowledge in an active, self-directed and constructive way (Volman & VanEck, 2001).

By itself, giving students access to computers and educational content might not have much of an impact on the teaching and learning process unless teachers are at ease with new methods of incorporating ICT in the classroom. ICT is particularly important in helping teachers and students perform more effectively. ICT has created a paradigm shift in pedagogy and education methods. ICT supported learning catalyses an easy-to-manage learning environment where information is delivered more smoothly and learning is made simpler. ICT-supported learning gives students access to knowledge at any time and from any location. Therefore, student teachers, who will be the teachers of the future, need to keep up with the latest technologies in order to have strong digital abilities. Pre-service teachers can be trained to become efficient and productive teachers through teacher training. Hence, it is vital to provide instruction, acquire and enhance life skills, as well as maximise the use of IT tools in the institutions throughout their pre-service training programmes. It has been

observed that the B.Ed. curriculum has been designed, modified, and revised over the years at regular intervals with the sole aim and objective of fully fostering excellent teaching skills among the student-teachers. Life skills empower the young teacher trainees to act responsibly, take initiative, and take control. Life skills training helped in improving self-esteem, self-efficacy, communication skills, and adjustment for these student-teachers (Mishal, 2016). ICT is not merely seen as a supplement to or a replacement for traditional educational strategies. ICT is viewed as a crucial tool to promote innovative teaching and learning methodologies.

1.1. Life Skills

Developing our capacity for what is typically referred to as "life skills" includes learning how to think critically, solve problems, be self-aware, manage stress, make decisions, interact with others, control our emotions, or even just manage stress and emotions. People may convert their knowledge, attitudes, and beliefs into useful talents and action (what to do and how to do it) through the application of life skills. Life skills are the aptitudes for flexible and constructive behaviour that enable people to successfully handle the demands and barriers of daily life, according to the World Health Organisation (1999). The same definition is given by UNICEF, which describes life skills as ‘a large group of psychosocial and interpersonal skills, which can help people, make informed choices, communicate effectively, and develop coping and self-regulation abilities that may help them lead a healthy and productive life’. No matter if you are a student or a teacher, having life skills is essential because they help us develop our creativity, enable us to succeed where we can, increase our resilience and problem-solving skills in areas where we may be limited, and get us ready for a variety of situations that would otherwise be very difficult. The development of various life skills leads to a body of information about how to approach everyday situations both within and outside of educational institutions in a methodical way.

Life skills are ‘psychosocial abilities for adaptive and constructive behaviour that enable individuals to effectively deal with the demands and obstacles of everyday life’, according to the United Nations Children's Fund (2003). Life skills are broadly grouped into three categories: cognitive skills (for utilising and analysing

information), personal skills (for controlling oneself) and inter-personal skills (for effectively communicating and engaging with others). Hamburg (1990) defined life skills training as the teaching of requisite skills for surviving, living with others, and succeeding in a complex society. The generic skills are communication, interpersonal negotiation, self-regulation and decision making skills.

Powell (1995) defines life skills as the life coping skills consonant with the developmental tasks of the basic human development processes, namely those skills necessary to perform tasks for a given age and gender in the following areas of human development – psychological, physical, sexual, vocational, cognitive, moral, ego and emotional. There are taxonomies of generic life skills for categorizing and arranging a wide range of life skills.

Brooks (1984) used empirical approach to classify life skills. Using the Delphi study, in conjunction with developmental psychology theorists (Erikson, 1963, Havighurst 1972, Kohlberg, 1980) classified 305 life skills descriptors into four categories such as 1) interpersonal communication and human relations skills; 2) problem solving and decision making skills; 3) physical fitness and health maintenance skills; and 4) identifying development / purpose in life skills.

Life skills are, in general, the fundamental abilities required for successful functioning in life. Life skills are any skills that enable people to successfully manage issues and challenges that are frequently faced in daily life. These abilities can be learned, acquired directly or indirectly through life events. WHO, has laid down 10 core life skills:

1. Self-awareness: It entails acknowledging oneself, one's personality, one's virtues and flaws, as well as one's preferences and dislikes. Our ability to identify when we are anxious or under pressure can be improved by developing self-awareness. Effective interpersonal relationships, communication, and the ability to empathize with others are important prerequisites.

2. Effective communication: This implies that we are developing the abilities to communicate clearly, empathetically, and understandably with one another in

both spoken and nonverbal manners that are relevant to our cultures and contexts.

3. Interpersonal relationship: It enables us to connect positively with those we engage with. This could entail the capacity to establish and maintain amicable bonds, which can be crucial for our psychological and social well-being. Keeping up excellent relations with family members, who are a crucial source of social support, may entail doing so. Moreover, it might imply the capacity for amicably ending partnerships.

4. Empathy: To have a successful relationship with our family members and the rest of society, we must comprehend and care about their needs, wants, and feelings. The capacity to envision what another person's life might be like is empathy. Without empathy, the whole of our interactions with other individuals will be one-way. We may embrace those who may be extremely different from us by developing empathy. This can enhance social relationships, particularly when there is a range of racial or cultural backgrounds.

5. Coping with stress: Recognizing the causes of our stress, understanding how it affects us and taking steps to reduce it by adjusting our environment or way of life and learning to relax are all part of coping with stress. We constantly operate in accordance with our cellular beliefs, which are unconscious programming. Stress is the primary cause of all diseases, including those of the body, mind, and emotions, according to scientific study. By awareness and modest lifestyle changes, one can restore their youthful exuberance, joy, and well-being by learning how unconscious physical, mental, and emotional habits cause stress, ageing, addiction, and disease.

6. Coping with emotion: Being able to cope with emotions requires being able to identify emotions in ourselves and others, being aware of how emotions affect behaviour, and effectively handling emotions. If we don't react appropriately to strong emotions like anger or sadness, it can harm our health. We need to

begin practicing how to control our emotions from an early age, and we'll have to continue learning it for the rest of our lives. It is a skill that will empower us to interact with others more effectively. Both our personal and professional life will benefit from it, making us more successful in both.

7. Problem solving: It enables us to approach issues in our life in a healthy way. Unresolved significant issues can lead to mental stress and the related physical strain. The process of locating and resolving conflicts or problems is characterized as problem-solving. It entails dissecting a problem into its component elements, considering potential solutions, and finally deciding on the best one. Because it enables us to recognize and address issues in our personal lives, professional careers, and communities, problem-solving is an essential skill for everyone.

8. Decision making: It enables us to make wise choices regarding our lives. This can have consequences for health. People can learn how to actively choose their behaviours based on the health assessment of various possibilities and the effects those choices are expected to have.

9. Creative thinking: It is a distinct manner of thinking or doing that embodies the qualities of four elements: fluency (producing innovative thinking), flexibility (easily shifting perspectives), originality (conceiving of something new), and elaboration (building on other ideas).

10. Critical thinking: It is the capability of objectively analyzing data and experiences. By assisting us in identifying and evaluating issues like values, peer pressure, and the media that affect attitudes and behaviour, critical thinking can enhance our mental and physical health.

1.2. Importance of Life Skill

Life skills are a required aspect of an individual, be it a student or a teacher because they hone our creativity, empower us to achieve in areas where we can, build up our resilience and problem solving abilities in areas where we may be hampered, as well as prepare us for diverse forms of social interactions which could all otherwise be a very arduous task. Acquiring different life skills culminate in a reservoir of knowledge on how to handle daily experiences in a methodological manner inside and outside educational institutions. Life skills education bridges the gap between basic functioning and capabilities. It strengthens the ability of an individual to meet the needs and demands of everyday life, and helps in dealing with issues in a practical manner (Prajapati et al., 2017). The profession of teaching is widely acknowledged in the contemporary educational system as requiring both a set of academic and life skills. Although they are frequently overlooked in formal education requirements, life skills are crucial for teachers to succeed in their profession. Life skills for teachers include organization, communication, financial planning, time management and empathy (Parmar, 2022). In today's dynamic environment, the capacity to learn and develop life skills is crucial. In today's ever changing environment, it is imperative to be able to learn and develop life skills. It is essential to navigating life's challenges and unforeseen occurrences. The rapid developments in the world have an impact on every area of our life, like business, education and personal life. People need to develop new life skills to deal with anxiety and frustration in order to cope with the fast-paced modern lifestyle. People today have a variety of new occupations that comes with pressures and flexibility (Sowmyashree & Sreenivasam, 2019). New approaches of problem-solving are discovered in life skills education. It explains the results of their actions and helps individual to take accountability of their choices. It fosters trust and the capacity for interaction verbally. It analyses choices, identifies issues, and comprehends the justifications for those decisions. Education in life skills cultivates self-awareness and gratitude for others. Life skills training had a considerable effect on mental health parameters. Considering the significance of mental health in modern societies and particularly in adolescents, it is of importance to incorporate these skills in school curriculum and hold workshops for parents to improve the mental health of the adolescents (WHO, 1999). Asserting personal

accountability for their actions rather than placing blame on others is another benefit of life skills for student, who can then act in absence of their parents or teachers.

For teachers and student teachers, developing life skills is essential for the effective use of pedagogy and the advancement of students' moral and intellectual standing. Teachers who excel in critical thinking, communication, empathy, assertiveness, organization, and management are better able to strike a balance between acting in their students' best interests and upholding the institution's goals and standards. By developing self-awareness at all times, admitting prejudices, preferences, strengths, and limits to analyse one's own cognition and assess events objectively before making judgements or taking actions, teachers and student teachers can build critical thinking abilities. A decent teacher should be able to lead and direct their class; they should have the capacity to deal with students that have a variety of personality traits and guide misbehaving students in the correct direction. Such skills will enable the teacher to set a positive example for their students and function as a significant role model for them. Students' learning styles, intellectual abilities, and familial and cultural origins are all represented in the classes. Devoted students will likely be more involved in class activities and will likely be more relaxed, but some of the students may also cause issues by getting into arguments and causing commotions. As a result, a teacher with strong communication abilities, assertiveness, empathy, and the capacity to handle stress and emotions are more likely to show patience and active listening to weigh each point of view and come to a compromise by making an effort to keep conversations from getting out of hand. Teachers should be able to handle such situations professionally and calmly while maintaining equilibrium between their own expectations and the unique personalities of the students.

1.3. Social Intelligence

Humans are social creatures, as we all know, and interpersonal connection is the foundation of our social nature. Considering how humans evolved, it is obvious that we are social beings and that we might not have accomplished what we have done without social connections. Humans are basically sociable animals. It is difficult to envision a man existing without a social structure. He is a product of society; he

develops, works, and progresses within it. Social development is essential for proper adjustment in the society.

Social intelligence means the ability and skills of an individual to react and deal effectively to social situations of daily life. Social intelligence is the capacity to collaborate with people under all conditions. It is the capacity to balance effectively with others. A person with social intelligence has the potential to get along with others. Social intelligence would not include the sensations or emotions others elicit in us, but rather our capacity to comprehend others and operate in a manner that assists us accomplish what we want in dealing with others. The ability to collaborate well with others is an indicator of social intelligence. One's degree of familiarity with the social environment is what matters. Social intelligence is highly associated with personality skills of the person (Kihistrom & Cantor, 2000). Silberman and Hansburg (2000) identified the following dimensions of social intelligence: understanding people and sympathizing with them; expressing oneself clearly; impacting others; conflict resolution; and maintaining relationships with others. Shearer (2004) assumes three skills for social intelligence: the ability to observe individual differences between individuals; the ability to recognize the feelings, moods, points of views and motivations of others; and the ability to manage and lead groups. If an individual encounters suitable experiences and suitable training and development opportunities throughout their life, their social intelligence are likely to develop. Achieving happiness with others, adhering to social norms, coping with social criteria, compliance with the rules of social control, accepting change, maintaining healthy social interactions and working for the good of the team all fall under the category of social intelligence. Social happiness is ultimately the outcome of these qualities. Anyone with social intelligence have an instinctive grasp of how others are feeling, know what to say in social settings, and project confidence even in the presence of larger crowds. A person is well-minded when he or she has to be intelligent so that he can think reasonably, act decisively, and effectively deal with the environment. The theory of social intelligence was first brought to the forefront by American psychologist Edward Thorndike in 1920. He defined it as, “The ability to understand and manage men and women and boys and girls, to act wisely in human relations”. No one is born socially intelligent. Instead, it involves a set of skills that an individual learns over time.

Social intelligence is one of the most popular areas of education research. In the current era characterized by social confrontations by the withdrawal of social norms, it is difficult to lead a successful life in a society without social intelligence. The social intelligence of an individual can only be known or measured from its adaptation. A person is well-minded when he or she has to be intelligent so that he can think reasonably, act decisively, and effectively deal with the environment. Only when evaluated in light of societal needs can someone be considered socially intelligent. Man must demonstrate love, empathy, collaboration, and kindness in order to successfully survive in society. Since every society has its own set of norms, values, and traditions, it is the responsibility of every individual to respect these in order to ensure that society functions and to allow him to survive.

In order to live a fulfilling life, people ought to be intelligent in general and socially intelligent in particular. Only social intelligence holds the key to solving this issue; high I.Q levels alone are insufficient to make an individual ideal for society. It aids people who find it difficult to adapt and adjust in social settings. Thorndike (1920) defined social intelligence as the capacity to comprehend people and behave sensibly in interpersonal interactions. Social intelligence is a feature of a person's mental capacity that enables social adaption. To develop an ideal and productive work environment, social intelligence is necessary for developing the abilities of effective verbal and nonverbal communication, teamwork, interpersonal relationships, assertiveness, empathy, compassion, and management skills.

1.4. Importance of Social Intelligence

Man is basically a social animal. His existence without social set-up can hardly be imagined. He is born in society, develops, works and progress in society. Social development is very essential for proper adjustment in the society. People with high social intelligence possess magnetic powers that attract others, and are friendly, supportive and caring; they are successful in the society (Joseph & Lakshmi, 2010). Social intelligence is essential for unlocking the skills of effective verbal and non-verbal communication, teamwork, interpersonal relationship, assertiveness, empathy, sympathy, managerial skills to create an optimal and productive work environment. Having excellent social skills is essential and effective for carrying out the duties and responsibilities of a teacher. Social intelligence is crucial for teachers to connect with

students in an efficient manner and to comprehend pupils in the classroom, along with their social environment.

In order to teach effectively and facilitate learning, teacher-student relationships are highly crucial. A positive relationship between the student and the teacher does have a big impact on how well the student performs and motivates them to do better in school and in their social lives. Interpersonal skills, verbal and nonverbal communication skills, cooperation and teamwork skills, academic motivation, and academic accomplishment are all related to a teacher's professional skills in terms of the learning environment and the evaluation process. The effectiveness of their learning is influenced by the teachers' professional skills, which also affect the student-teacher relationship. The success of the student is significantly impacted by the professional and interpersonal skills of the teachers. Teacher who have strong interpersonal skills, verbal and non-verbal communication skills, empathy, problem solving skills, giving and receiving constructive feedback, reading social cues, understanding humour, active listening, assertiveness, deal effectively with conflict, co-operation and collaboration skills enables meaningful cooperation among students. Positive student-teacher relations help the students to involve positively in academic and social activities. It will increase the productivity of the students (Hamre & Pianta, 2010). Closeness, warmth, and positivism are conducive to the development of good teacher-student relationships. It provides a secure base to student so they may perform better in the classroom and during school-related activities, both academically and socially. They accept academic challenges and are able to work on social-emotional developmental features as well. In positive relationship students learn socially acceptable behaviours and achieve academic expectations. Positive student-teacher relations are more beneficial for the students with low socio-economic background. It boosts them to get more from the teacher (Murray & Malmgren, 2005). Positive teacher-student relationships help pupils feel comfortable and protected in their learning environment and contribute to the growth of essential social and academic skills. Teachers play a vital role in this. Students will probably be more engaged in the class if the teacher has good interpersonal skills, verbal communication, and nonverbal communication skills. In a typical class environment, a teacher's key responsibility is to keep order in order to facilitate successful teaching and learning. Without appropriate discipline, teaching-learning

cannot be successful in a classroom. It is social intelligence that equips teachers to uphold constructive interpersonal relationships as well as proactive and efficient management of learning and self-motivation.

Student teacher have the opportunity to develop their interpersonal relationship and communication skills during their pre-service training period through class meeting, practical teaching, seminar, assignment, group project work. It is essential to have the skills deconstruct complex ideas and make them simple enough for them to comprehend clearly. Student teachers needs to learn the skills to be able to explain and demonstrate clearly any topic that is to be discuss, so that complex concepts are simplified using memorable examples or props which will be very essential and helpful after becoming a teacher which they are prepare for. Cooperation, collaboration, interpersonal relationship and effective communication skills will enable a teacher to interact productively and effectively with school personnel besides students as well as other teachers. Teachers with strong cooperation, communication and interpersonal relationship skills can accept input from others, even if they have differing opinions and handle each circumstance appropriately. Educators with high levels of social intelligence are able to mould individuals from different age groups to lead a wholesome life.

1.5. Information and Communication Technology

ICT is the fusion of computers and the telecommunications. Computers enable people to work creatively but they are limited by what they can access. Adding a communications channel, such as the internet or other information services, significantly extends the capability of the computer. It can also become a means of obtaining education, information and working creatively with others irrespective of geographical barriers (Pathak & Chaudhury, 2012). ICT refers to a field of technology that processes and exchanges information in order to serve human needs. Information and Communication and Technology is often used as an extended synonym for Information Technology, but is a more specific term that stresses the role of unified and the integration of telecommunication (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage and audio-visual system, which enables users to access, store, transmit and manipulate

information (Kearns & Grant, 2002). Competences has been defined in the literature as the stage or quality of being adequately or well-qualified to perform a task (OECD, 2001). ICTs as defined by United Nations Development Programme (UNDP), are basically information-handling tools a varied set of goods, application and services that are used to produce, store, process, distribute and exchange information. In some parts of the world, ICT is used as a synonym for information technology (IT), but the two terms can have slightly different meanings when used in different contexts. For example, in the United States the label IT is used when discussing technology in terms of business operations - while the label ICT is used more often in the context of education (Hawkridge, 1990).

The National Centre for Technology in Education (NCTE-2000) states that ICT being an interdisciplinary domain focuses on providing students with the tools to transform their learning and to enrich their learning environment. The knowledge, skills and behaviours identified for this domain enable students to: develop thinking and learning skills that produce creative and innovative insights; develop more productive ways of working and solving problems individually and collaboratively; create information products that demonstrate their understanding of concepts, issues, relationships and processes; express themselves in contemporary and socially relevant ways; communicate locally and globally to solve problems; share knowledge and understand the implications of the use of ICT and their social and ethical responsibilities as uses of ICT. ICT in education is the processing of information and its communications facilities and features that variously support teaching-learning and a range of activities in education (Webb & Cox, 2004). In the era of computer technology the term ICT mainly focuses on the infrastructure, devices and sources of computer technology and thus it is imperative to discuss about the use of ICT in education by focusing mainly on computer based technology. ICTs have the potential to accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economy viability for tomorrow's workers as well as strengthening teaching-learning process (Yusuf, 2005). The integration of information and communication technologies can help revitalize teachers and students by supplying curricular support in challenging topic areas, this can aid in improving and enhancing the quality of education.

According to Yuen et al. (2005), ICT in education refers to any information technology that focuses on the capture, storage, modification, management, transmission, or receipt of data needed for educational purposes. The potential for teaching and learning is virtually limitless thanks to the use of ICT by educators and students alike. Communication is the sharing of thoughts, feelings, experiences, and information between two or more people. Technology is crucial in the conversion of data into information, knowledge, and wisdom (Kozma, 2005). ICT in education refers any educational technology that deals with the exchange of information or in other words communication in the teaching-learning process. It encompasses hardware approach like use of machine and materials software approach like use of methodologies and strategies of teaching–learning and system approach that uses the management technology that deals with the systematic organization of the hardware and the software (Harris, 2002). ICT enables teachers and students to construct rich multi-sensory, interactive environments with almost unlimited teaching and learning potential. When ideas, emotions, experiences and information are exchanged between two or more persons it is referred as communication. Technology plays an important role in transforming data to information, to knowledge and into wisdom (Kozma, 2005).

In an effort to promote widespread computer literacy, the Indian government established a national task force on information technology and software development in may 1998. The National Curriculum Framework for school education from 2005 places emphasis on a paradigm change with regard to the entire educational process. The role of ICT in education has been highlighted in both the Twelfth Five Year Plan (2012–2017) and the Eleventh Five Year Plan (2007–2012), with an eye towards ICT's potential. In the Twelfth Five Year Plan, the National Policy of ICT in School Education envisions and provides for the development of a holistic framework of ICT support in the school system. The current Prime Minister, Narendra Modi have launched the Digital India, a flag ship programme of the Government of India with a vision to transform India into a digital empowered society and knowledge economy. But it is not feasible unless the people are trained. Information and Communication Technology in education refers to any technology that focuses on the collection, archiving, management, manipulation, transmission, or reception of data needed for

educational purposes. For instance, information about student records, admissions, auricular updates, and extracurricular and co-curricular activities.

The Mizoram State Government has created policies to promote the use of IT in several areas, including education, and supports its widespread adoption. Mizoram IT Policy 2001, states that; in order to achieve total computer literacy in Mizoram the Government shall encourage the use of information technology in schools, colleges and all educational institutions for which special program and special resources shall be envisaged by the Education Department in collaboration with the IT nodal agency of the State for creating necessary infrastructure to achieve this goal. The Education Department shall strive to develop an appropriate curriculum for all educational institutions of Mizoram so as to make IT a compulsory subject from the level of Primary School to Higher Secondary School. Information and communication technologies (ICT) are imperative in enhancing the quality of education. To make the best use of ICT, teachers must be equipped with adequate ICT competences.

1.6 Importance of ICT

ICTs' significance in the process of teaching and learning has been examined in theoretical and empirical investigations. ICT enables teachers to access to multimedia learning resources, which support constructive concept development, allows the teacher to focus more on being a facilitator to a learner by providing personal attention. ICT is used by teachers to design lessons more successfully and efficiently. Due to a more collaborative approach between teachers and ICT, which provides opportunities to access a wide range of knowledge using multiple information resources and viewing information from a variety of perspectives, ICT increases efficiency in planning and preparation of work. This promotes the authenticity of learning environments. Thus, ICT may function as a facilitator of active learning and higher order thinking (Alexander, 1999). An innovative teacher must know the emerging technology in teaching and learning environment, to develop digital skills among students. Teachers need to be well-versed in ICT to exploit it to its full potential. Competencies are a set of requirements for effective performance in specific domains that can be impacted by practise and learning. To be successful in any role, job, or career, a person needs to possess certain competencies. In recent

years, the use of ICT has increased in India, notably with the Kothari Commission's recommendation to reinforce the use of technology in HEI (Higher Education Institution) academics. In contradict to traditional teaching and learning techniques, ICT promises efficiency, accuracy and skill development. It facilitates faster delivery and transaction of knowledge, keeping pace with the time and demand, more so with education seem to seek employment based on skills. Thus, adoption and integration of ICT is crucial in procuring access to information and new advances.

ICTs in education enable teachers, students and professionals to access research resources and study material from anywhere. Using ICT, we can improve and comprehend the learning process, collaborate across time and space, and address 'complex real-world challenges' (UNESCO, 2018). As the Covid-19 pandemic spread worldwide in 2020, governments across the world were forced to shut down offices, schools, colleges, universities and many other educational institutions. All possible measures were taken to stop viral outbreak including suspending numerous institutions and allowing employees to work remotely or with flexible hours. All levels of educational institutions were forced by this circumstance to operate remotely and implement emergency remote instruction. Teachers need to integrate digital technologies into classroom. The use of technology did not indicate high-quality teaching, but rather depended on how teachers integrated technology into their teaching (Gonzalez et al., 2020).Teachers' digital teaching competence were key factors in enhancing their professional development and improving students' learning processes (Fernandez-Batanero et al., 2020). Research also showed that teachers' digital teaching competence was key to integrating digital technologies into educational practice (Lazaro-Cantabrana et al., 2019), which would affect students. In today's classroom, teachers often needed to use digital technology to carry out teaching activities. However, in the process of teaching, teachers with poor digital teaching competence might not be able to take full advantage of ICT to promote students' knowledge (Guillen-Gamez et al., 2019). Previous studies showed that empowering students' digital competence could be enhanced by improving teachers' digital teaching competence, such as reusing instructional media and digital resources (Robles Moral & Fernandez Diaz, 2021), developing teaching models with digital technologies and providing personalized learning support (Arco et al., 2021, Zhang et al., 2021).Students and teachers are now relying on various online platforms to adopt

new pedagogical methods to learn and teach. India Report-Digital Education 2020 showed how ICT enhanced the effectiveness of the various e-learning initiatives which were used in reaching out to student across the length and breadth of the country during the Covid-19 lockdown period. The report also lists some of the best practices adopted by the Centre and State and also identifies challenges and gap areas which will be continued to be addressed and newer innovative e-learning solutions are developed so that no learner is left behind (Press Information Bureau, 2020).

ICT in education enhanced teaching and learning activities by allowing the learners to learn from experts across the world besides classroom lectures, ICT allows for new ways of learning beyond traditional classroom lectures for students and teachers. With numerous unusual occurrences occurring in our lives, e-learning is becoming increasingly prevalent. As a consequence, educational institutions are now given greater opportunities to make sure that students have access to curriculum materials outside of the classroom as well as at home and even in hospitals. Students with special needs are no longer at a disadvantage as they have access to essential material and special ICT tools can be used by special students for their own educational needs. This is proof that these advancements are beneficial and are now considered an essential part of our lives. One of the most used innovations is Information and Communication Technology or ICT. As classrooms continue to incorporate technology, high level of ICT competencies is becoming more important for teachers. The design of lesson plans, worksheets, study materials, tests, and other deliverables by teachers may be carried out via computers in addition to keeping track of grades. Also, teachers use digital tools in the classroom, such as interactive activities and online clips, to make their lessons more interesting. Teachers should be at ease employing e-digital devices for educational purposes, from creating electronic presentations and spreadsheets to operating printing software and attendance systems.

1.7. Teacher Education in India

The first formal teacher's training school in India was set up at Serampur in Bengal in the name of Normal School by Carey, Marshman and Ward in 1793. In Bombay, the Native Education Society trained a number of teachers for the improvement of teaching in primary schools. In Bengal the Calcutta School Society

did pioneering work for the training of teachers for indigenous schools. The Ladies Society of Calcutta started a training class for training women teachers in the Calcutta Central School for girls. A number of government training schools were also set up in the first half of the nineteenth century. In the beginning of the 20th century, the programme of teacher preparation was called teacher training. According to the National Council for Teacher Education, Teacher Education is, 'a programme, research and training of persons to teach from pre-primary to higher education level'

As the Twelfth Five Year Plan has mentioned in the Social Section, teachers need to be adequately prepared to deal with the realities of their schools. In many areas, particularly rural areas, there are multi-age, multi-grade and multi-ability classrooms. In order to improve learning outcomes for a diverse group of children, it would be necessary for teachers to possess specialised skills. These skills would include not just the requisite subject knowledge, but also a repertory of pedagogical approaches and strategies. Fourth and Fifth 5 year plans provided correspondence courses to thousands of elementary and secondary teachers as in-service programmes. B. Ed course was started as correspondence mode by Himachal Pradesh University, Jaipur University and several South Indian universities with assistance of NCERT. NCERT Regional Colleges were started at Ajmer, Mysore, Bhubaneswar and Bhopal. NCTE Act was passes in 1993 by the Parliament and NCTE was given the responsibility to look after the Teacher Education of the country. The Eleventh plan was a boost for education sector. It focussed on-

• Strengthening Teacher Education by
• Augmenting teacher education capacity in SC/ST and minority areas.
• Professional development of teacher through training programmes.
• Professional development of teacher educators through refresher courses and fellowship programmes.
• Technology in teacher education.
• Integrating elementary teacher education with higher education.

In the Twelfth 5 year plan, the thrust area is to integrate technology in teacher education to promote openness for adaptability to new technology for developing professionalism. Teacher education is essential for every teacher. Teachers who have gone through teacher education programme can do much more than untrained

teachers. Teaching is not confined to tell or impart knowledge of subject-matter to others; the perspective of teaching is wider. Having the right skills and attitude such as the responsibility and duties of a teacher can be developed only through a programme of teacher education.

1.8. Importance of Pre- Service Teacher Education

Pre-service teachers' education refers to their training before beginning their careers as educators. During this period of teacher education programmes, practice teaching coexists with theoretical knowledge. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein.

Pre-service teacher education is the course which is offered by the students before they join the teaching profession. Pre-service teacher education (PSTE) programs are the first form of professional study that individuals complete to enter the teaching profession (Educational System, 2013). Multiple kinds of teachers are being prepared through pre-service education. Pre-service teacher preparation is a collection of unrelated courses and field experience. Research based curriculum development of pre-service teacher education is yet to take roots. These programmes are intended to support and enhance teacher learning instil in them a greater degree of self-confidence. The beginning teachers in this case learn from their practice and from the culture and norms of the unique school settings where in they have been placed and interact with these cultures (Kozhikode, 2020).

The methodology of how to connect with the fundamental characteristics of a good teacher and how to encourage these characteristics in student teachers is crucial knowledge for teacher educators to acquire. This will encourage teacher educators and student teachers to become more deeply involved in their own learning processes. The inclusion of appropriate content knowledge about essential qualities of a good teacher in relevant theory papers and practice of effective domain related traits in school situation for a longer duration could help promote these traits in student teachers. In order for a teacher to become an agent of change after becoming a teacher, the teacher

education programme needs to set up a space wherein a teacher's personality could indeed develop as someone who is reflective, introspective, and capable of analysing both his or her own life and the process of education at school. The student teacher will be able to become a productive and efficient teacher from pre-service teacher training. They will be capable of managing the classroom in accordance with the requirements and requirements of the students. It enhances their attempts at building a positive and encouraging learning environment and improves students' academic performance. According to Hammond (2007) teachers' professional skills includes preparation of teaching and learning, content knowledge, teaching experience, transmitting the information to the students in understandable manner. The role of teachers' content knowledge has great impact on students' achievement (Begle, 2009). Teachers requires a variety of skill sets for creating lesson plans, instructing students, working with administrators and interacting with parents while some of the qualities and skills like communication, conflict resolution, patience, organisation, management, interpersonal relationship, critical thinking are inherent to individuals, but most of these skills can be develop through practice and training by the student teacher during their pre service training period. Teachers training institutions should keep promoting initiatives that help student teachers develop their interpersonal, communication and relationship skills, co-operate with others during classroom discussion, assigning student teachers into groups or pairing student teachers who have similar interests for project work and other collaborative activities to encourage teamwork in the classroom, seminar, workshop and class meeting. Teacher education plays an important role in shaping and moulding the habits, manners and all the characteristics of pupils to become effective teachers. (Kasture and Bhalerao, 2014)

1.9. Rationale of the Study and research questions

In order to manage students and class room environment successfully, teachers must possess a variety of skills. These include interpersonal relationship skills, effective communication, conflict resolution, coping with stress and emotion, cooperation skills, and empathy. This leads to enhanced student engagement and learning. Teachers are efficient and effective in the teaching profession when they are skilled in problem-solving methods, critical thinking abilities, interpersonal and social

relationships, managerial abilities, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication methods.ICT in education enhanced teaching and learning activities by allowing the learners to learn from experts across the world besides classroom lectures, ICT allows for new ways of learning beyond traditional classroom lectures for students and teachers. With numerous unusual occurrences occurring in our lives, e-learning is becoming increasingly prevalent. As a consequence, educational institutions are now given greater opportunities to make sure that students have access to curriculum materials outside of the classroom as well as at home and even in hospitals. Students with special needs are no longer at a disadvantage as they have access to essential material and special ICT tools can be used by special students for their own educational needs. This is proof that these advancements are beneficial and are now considered an essential part of our lives. This study has been undertaken to find out the level of life skills, social intelligence and ICT competencies of student teachers in Mizoram.

In the 21st century where education of women has taken on an increasingly significant role, it is important to find out whether there is any difference in the level of life skills, social intelligence and ICT competencies. Although most of the studies reviewed have highlighted that there is no significant difference in the level of life skills, social intelligence and ICT competencies between male and female students, it is necessary to prove or disprove this in societies like Mizo society where women education have been a backseat for so long. Thus, a research of this kind is much needed to shed light on this matter.

In the areas of life skills and social intelligence, life skills and emotional intelligence, life skills and achievement motivation, social intelligence and emotional intelligence, ICT and teaching methodology, and ICT and education, it has been observed that many researchers have conducted research using descriptive and experimental methods. Numerous research have been conducted on ICT, social intelligence, and life skills. Despite this, there remains a study deficit on how life skills affect social intelligence and ICT competencies. Therefore, it is crucial to acquire accurate data on this subject in order to both confirm our presumptions about how life skills affect social intelligence and ICT competences as well as to assist other studies who may benefit greatly from having access to such data. The results from this

study will, it is anticipated, offer further inputs to higher education institutions regarding the development and implementation of pre-service and in-service teacher training programs.

With reference to the above facts, the following research questions arise:

1. What is the effect of life skills on social intelligence of student teachers?
2. What is the effect of life skills on ICT competencies of student teachers?
3. Is there any significant difference between male and female student teachers in their level of life skills?
4. Is there any significant difference between male and female student teachers in their level of social intelligence?
5. Is there any significant difference between male and female student teachers in their level of ICT competencies?
6. What is the status of ICT infrastructure in teacher training institutes of Mizoram?
7. What is the level of use of the available ICT infrastructure by the student-teachers?

1.10. Statement of the Problem Study

In the light of the much needed information with regard to the effects of life skills on social intelligence and ICT, the problem of the study has been stated as:

"**Effect of Life Skills on Social Intelligence and ICT Competencies of Student Teachers of Mizoram**"

1.11. Objectives of the Study

1. To find out the level of life skills of student teachers of Mizoram.
2. To find out the level of social intelligence of student teachers of Mizoram.
3. To find out the level of ICT competencies of student teachers of Mizoram.

4. To compare the level of life skills of student teachers of Mizoram with reference to their gender.
5. To compare the level of social intelligence of student teachers of Mizoram with reference to their gender.
6. To compare the level of ICT competencies level of student teachers of Mizoram with reference to their gender.
7. To find out the effect of life skills on social intelligence of student teachers of Mizoram.
8. To find out the effect of life skills on ICT competencies of student teachers of Mizoram.

1.12. Hypotheses

The following hypotheses are framed in relation to the identified objectives:

1. There is no significant difference in the level life skills of student teachers of Mizoram with reference to their gender.
2. There is no significant difference in the level of social intelligence of student teachers of Mizoram with reference to their gender.
3. There is no significant difference in the level of ICT competencies of student teachers of Mizoram with reference to their gender
4. There is no significant effect of life skill on social intelligence of student teachers of Mizoram.
5. There is no significant effect of life skill on ICT of student teachers of Mizoram.

1.13 Operational definition of the term used

The terms used in the title of the study carry some specific meanings. The operational definitions of these terms are given as follows:-

Life Skills: Life skills are any skills acquired through learning, direct or indirect life experiences that enable individuals to effectively handle issues and problems commonly encountered in our daily life. In the present study, the term Life Skills

referred to the score of the sample students in Life Skills Scale developed by Raina Tiwari

Social Intelligence: Social intelligence refers to an ability to get along with others and also winning their co-operations. For the present study, social intelligence is represented by the score which is obtained from the Social Intelligence Scale developed by N. K. Chadha and Usha Ganesan

ICT Competencies: ICT competencies are a competence to use Information Communication and Technology in particular domains. For the present study, ICT competencies referred to the score of the sample students in ICT competencies developed by the investigator.

Student Teachers: Student teachers are those who are learning under the supervision of a certified teacher in order to qualify for a degree in education. For the present study student teachers referred to all the B. Ed students of Mizoram

Gender: For the present study gender refers to the male and female student teachers.

1.14. Delimitation of the Study

For the present study, the study was delimited to sample of 451 student teachers only. The study was restricted to B. Ed students from District Institute for Education and Training (Aizawl), Institute of Advanced Studies in Education, Department of Education, Mizoram University and District Institute for Education and Training (Lunglei).

1.15. ORGANISATION OF THE REPORT

CHAPTER I: INTRODUCTION

The first chapter is an introduction which begins with the concept and importance of Life Skills, Social Intelligence and ICT competencies. Besides these the chapter deals with the rationale of the study, statement of the problem, objectives

and hypotheses of the study. Operational definitions of the term used have also been incorporated.

CHAPTER II: REVIEW OF RELATED LITERATURE

This chapter deals with the review of related literature studied in India and aboard. The review of literatures has been divided into three categories: studies related to life skills, studies related to social intelligence and studies related to ICT

CHAPTER III: METHODOLOGY AND PROCEDURES

The third chapter describes the methodology and procedures adopted for the study. Research design, population and sample, tools for data collection, administration and collection of data and statistical technique have been discussed.

CHAPTER IV: ANALYSIS AND INTERPRETATION

This chapter presents an analysis and interpretation of the collected data on life skills, social intelligence and ICT Competencies of student teachers of Mizoram. In this chapter, the effects of life skills on social intelligence and the effect of life skills on ICT competencies of student teachers of Mizoram were also reported. In addition, to clarify the findings detailed study of the various dimensions of social intelligence and ICT competencies and comparison between male and female of student teacher on their level of life skills, social intelligence and ICT competencies were built-in.

CHAPTER V: MAJOR FINDINGS, DISCUSSION, CONCLUSION AND SUGGESTIONS.

The fifth chapter is the conclusion chapter which is devoted to the major findings of the study, discussion from the findings, educational implication, suggestions for further studies and conclusion

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CHAPTER - II

REVIEW OF RELATED LITERATURE

2.0. Introduction

Examining relevant literature is the topic of this chapter. Research on ICT competencies and life skills enables learners and educators to learn more effectively. Finding out what kind of research was conducted and precisely what was researched prior to the commencement of the current research endeavour is the major goal of examining previous research endeavours in relevant areas. The study of related literature and research work is very much necessary and important as it provides us proper guidelines. "A summary of the writings of recognized authorities and of previous research provides evidence that the researcher is familiar with what is already known and what is still unknown and untested. Since effective research is based upon past knowledge, this step helps to eliminate the duplication of what has been done and provides useful hypotheses and helpful suggestions for significant investigation" (Best, 2004). Therefore, the review of related literature not only offers conceptual frame of reference for the contemplated research but also suggests method, procedures, sources of data and statistical techniques which may be suitable to the solutions of the problem selected for the present study. The investigator is able to formulate the hypothesis on the basis of review of related literature which offers the rationale for the study. Theses ought to incorporate a review of relevant literature. A review of related literature's primary goal is to conduct a critical analysis of the scientific works produced by other researchers and employed in their investigations. A literature review analyses material that has been published in a certain field during a specific time frame. Although the literature review could merely consist of a list of the sources, it often follows a structure of organization and encompasses summary and synthesis.

There has been a plethora of studies made by many experts committees and individual scholars on the present topics. A few of these studies may be highlighted on this chapter. This chapter deals with the review of related literature. In the present study the investigator has used numerous books, dissertations, articles, journals,

thesis, and websites as reference material. The review of literatures has been divided into three categories: studies related to life skills, studies related to social intelligence and studies related to ICT which is presented in Table 2.1

Table 2.1

An overview of related research studied

Span of years of related literature reviewed	Studies related to Life Skills	Studies related to Social Intelligence	Studies related to ICT Competencies	Total number of related literature reviewed
1980-2022	**46**	**40**	**41**	**127**

2.1. Studies Related to Life Skills

Botvin et al. (1980) conducted a program on 'Preventing the Onset of Cigarette Smoking through Life Skills Training'. A sample of 281 was taken from 8th, 9th and 10th grade from science and health education subject in two sub-urban New York City schools. Both schools were generally comparable with respect to socio economic status and the prevalence of cigarette smoking. The program was intended to address the social and psychological factors influencing the onset of smoking by attempting to: a) enhance students ability to deal with direct pressure to smoke, b) lessen their vulnerability to indirect pro- smoking social influences, and c) improve their ability to handle anxiety. Group discussion, modelling and behaviour rehearsal were employed by health professionals. Experimental groups differ significantly from control groups among the population of fresh experimental smokers. Moreover, experimental group have shown considerably better changes on post-test on numerous knowledge and 54 psychological measures which suggested that the reduce in the beginning of smoking behaviour amongst the experimental samples did happen for the hypothesized reasons. The research study indicated that there were significant fewer new smokers among the student participating in the LST (life skills training) smoking prevention program than among the students in a control group; overall, the LST strategy reduced the incidence of new smoking by seventy five percent.

King (1999) investigated the 'The Effect of a Cultural-Based Life skills Curriculum on American Indian Adolescent Self-Esteem and Locus of Control'. Zuni Indian adolescents in grades 6, 7 and 8 were the subjects for the pre-test- post-test control- group design involving intact groups. Students were assigned to two different but related treatments: one received instruction from the Personal and Social Responsibility Curriculum with an American Indian Life Skills component (PSR/ LSKLS), a second group received the Personal Social Responsibility Curriculum (PSR) and the third group received no intervention. Both curricula were designed to teach Coping Skills and Socially acceptable behaviours although the PSR/ LSKLS component included a culturally sensitive curriculum. Two instruments, the Coopersmith Self- esteem Inventory (SEI) and the Children's Nowicki- Strickland Locus of Control (LOC) Scale were administered to the subjects .Additional data regarding age, gender, grade, behaviour incident reports, classes failed and absences were collected from school records. The PSR/LSKLS and the PSR groups had 40 and 39 students in each during the third quarter 55 (9 wks), the control group consisted of 40 PSR students. Students in both the PSR/LSKLS and PSR class 3 times a week. However, the PSR/LSKLS students received additional instruction from the Life Skills component twice per week. Statistical analysis included cross- tabulation of selected student data and a one-way ANOVA for determining the statistical significance of hypotheses relating to the effect of the treatment on Self-esteem and Locus of Control when stratified by gender and grade. The hypothesis relating to the effect of treating gender on self- esteem was significant. Males had higher self-esteem scores than female at the beginning of the research and increased at post testing. There were significant shifts in the locus of control among males and females.

Botvin et al. (2003) studied on 'Preventing Tobacco and Alcohol use among Elementary School Students through Life Skills Training' among elementary school students in grades 3 through 6. Rates of substance use behaviour, attitudes, knowledge, normative expectations, and related variables were examined among students (n = 1090) from 20 schools that were randomly assigned to either receive the prevention program (9 schools, n = 426) or serve as a control group (11 schools, n = 664). Data were analyzed at both the individual-level and school-level. Analysis on individual level which controls on gender, race, and family structures after the

intervention program have reported the student experiencing less smoking, higher anti-drinking attitudes, increased on substance use knowledge and skills-related knowledge, lower normative expectations for smoking and alcohol use. Post-test revealed boosting of self- esteem. Analysis on school level at the post-test as compared with control schools found marked improvement on smoking as well as for alcohol use. Besides, at the post-test evaluation, mean score of self- esteem were greater in intervention schools relative to control schools.

Sharma (2003) studied measuring life skills of adolescents in a secondary school of Kathmandu anddescribes that out of total 347 adolescents sample, 176 adolescents (51%) of the adolescent respondent had high level of life skills and 171(49%) had low level of life skills. Mother's education, connectedness and family support indicated significant connection with increased level of life skills in adolescents. On further analysis of the data it was found that out of the 10 dimensions of life skills (self-awareness, empathy, critical thinking, creative thinking, decision making, problem solving, effective communication ,interpersonal relationship, coping with stress and coping with emotion, adolescents in the age group of 14 to 15 years scored highest in the dimensions of effective communication, and critical thinking.

Marion County, Indiana verified that life skills training resulted in smaller numbers of smokers among the sample. Students in grades six to eight in the selected study schools received the life skills training curriculum for three years. The result also showed that more students are taking interest in the program rather than mingling with those smokers with an intention to stay smoke free. Those students finishing the life skills teaching curriculum were found to have better knowledge about the impact of smoking on their health.

Ellen et al. (2005) studied 'The Relationship of Parenting Style to Older Adolescent Life Skills Development in the United States'. 660 university freshmen (mean age = 17.9 years; 68.2% female; 86.5% non-Hispanic white) from mid-south university in the USA were surveyed regarding their perceptions of their parents'

parenting behaviours and their perceptions of their own life-skills development. The parenting style index consisted of the two parenting style dimensions: responsiveness and demandingness. The Life-skills Development Inventory-College Form was used to measure life skills in four domains: interpersonal communication, decision making, health maintenance, and identity development. Simultaneous regression revealed that parental responsiveness have significant prediction towards life skills development in relation to their age, gender and socio-economic status, while parental demand had no indication towards life skills development. Study suggests that open and conducive parental style environment favours towards positive life skills development in older adolescent.

Gamble (2006) wrote an article on teaching life skills for student success: in Chicago public schools (CPS), a program that teaches life skills is helping students make a successful transition into the workforce and into personal success' have identified the struggle faced by the graduates in getting their job as well as retaining the jobs by those who are already employed. Educators at Chicago have hired the company all students can learn to write curriculum which deals with employability skills for junior high school students through university students and adults entering the workforce. Chicago Public School further piloted this curriculum successfully with great responses from teachers and students.

Ajitha (2007) studied the impact of life skills education on psychosocial competence of adolescents. Samples were taken from high school students of Karnataka state using purposive sampling. It was found out that male showed significantly higher level of problem solving and self-awareness skills than female. Subjects belonging to nuclear type of family have shown higher decision making skill, critical thinking skill, empathy, self-awareness skill, coping with stress, interpersonal relationships skill as well as overall psychosocial competence. Subjects whose fathers have limited education have better coping with emotions skill whereas whose subjects whose fathers are professionals pr working in government institutions or banks are found to be having better decision making skill. . The research findings showed that life skills education contributed to significant enhancement of

psychosocial competence in the subjects, brief duration of life skills education significantly impacts the psychosocial competence and helps in maximizing the growth of the adolescents and contributes positively to their physical, mental and social health.

Buhler et al. (2007) conducted a research on 'The Role of Life Skills in Substance Abuse Prevention: A Mediation Analysis'. The sample comprised 643 fifth graders from 22 classes of seven 'Realschulen', a type of non-college bound school typically leading students into professions not requiring university-level qualifications. To examine the effectiveness of 57 prevention programs in promoting the knowledge about life skills and in enhancing their behaviours. Mediation analyses highlighted that with the increase in their knowledge relating to life skills leads towards the increase in student avoidance in using various substance abusers. Behaviours manifestation enhanced life skills had significant effect among smokers. Findings suggested that promoting and enhancing knowledge about life skill may bring about a favourable outcome in the prevention of substance abuse. The studied result also showed that increasing knowledge about life skills (communication, problem solving) was followed by a more distant attitude toward tobacco and alcohol and fewer cases of nicotine abuse after the intervention.

Nicholas et al. (2008) studied an interpretive analysis of life skills associated with sport participation. The purpose of their study was to examine how people may learn life skills through their involvement in regular competitive sport programmes. They conducted interviews with 40 young adults (20 males and 20 females) who were participants in competitive youth sport during their adolescence. Data were transcribed verbatim and subjected to an interpretive analysis. They presented three main interpretations of participants' experiences based around the idea that sport itself did not teach life skills. Rather, social interactions were central to how people learned life skills. First, participants learned social life skills through interactions with peers in sport contexts; these skills retained meaning in the participants' adult lives. Second, participants' parents used sport to reinforce values relating to sportspersonship and

work ethic. Third, coaches emphasised hard work and teamwork but also had some negative influences on participants' experiences. From their findings they concluded that the idea that sport can provide an educational context for acquiring life skills but highlight those interactions with key social agents (peers, parents and coaches) are crucial components of how people learn life skills through their involvement in sport.

Lineo (2009) conducted a study on 'Life Skills of Adolescents for National Development regardless of their diversity in Culture, Economic Conditions and Social and Political Structures' to explore the core components of life skills programmes in place at Lesotho education system to tackle the problems like poverty , spread of HIV/AIDS and alcohol and drug abuse. The study looked into the matter related to the implementation and evaluation of the programmes at various level of education: primary schools, secondary schools and higher educational institutions. Study resulted numerous issues and potentials emerging from assessment and evaluation, quality and the capability of teacher in the deliverance of the programmes. The study further recommended for implementation of open and distance learning mode programmes by the Government of Lesotho and learners to participate.

Martin and David (2009) researched on the life skills needs of British adolescent athletes; the purpose of this study was to explore how life skills are defined, which life skills British adolescent athletes need, and which life skills are the most important. Nineteen adolescent athletes, 10 coaches, 4 experts in sport psychology (pilot group) and 5 graduate students (pilot group) participated in a series of focus groups. Life skills were defined as ranges of transferable skills needed for everyday life, by everybody, that help people thrive. Participants described the need for interpersonal skills including social skills, respect, leadership, family interactions, and communication. Personal skills including self-organization, discipline, self-reliance, goal setting, managing performance outcomes, and motivation, were also reported. Social skills were identified as the most important life skills.

Bharath and Kumar (2010) evaluated the impact of empowering adolescents with life skills education in schools – school mental health program: Does it work. To assess the impact of the life skills education program (LSE program -NIMHANS model) they assessed the difference between adolescents who were in the program and not in the program. The samples were selected from two schools in the Bangalore rural district (Chennapatna) and two schools from Udupi District of both sexes 14 to 16 years studying in 8th, 9th or 10th standard. The impact of the program is evaluated at the end of 1 year in 605 adolescents from two secondary schools in comparison to age, sex, socioeconomic status-matched adolescents from nearby schools not in the program. Evaluation of the impact of the training program showed that it improves adjustment of the adolescents with teachers, school, and increases pro-social-behaviour, coping with issues, and self–esteem, as there was a significant difference between the groups in the program and not in the program.

Garg (2011) carried out a research entitled'Academic Anxiety and Life Skills of Secondary School Children' explained that gender do not have significant difference in academic anxiety, and of government and private school students. Also, no significant difference was found in life skills of boys and girls, however, it was found out that private schools students had better life skills than the government school students. The study revealed significant highly negative relationship between academic anxiety and life skills.

Esmaeilinasab et al. (2011) assessed an experimental research on effectiveness of life skills training on increasing self-esteem of high school students in Karaj city, Iran. A sample of 160 students was divided into two groups: control group and study group. Trained counsellor taught life skills to the students of study group. After completion of the life skills training program, Cooper Smith self-esteem questionnaire was administered to the control group and study group. They found out that life skills training lead to significant increase of self-esteem in study group in contrast to control group.

Lalhriatpuii and Abraham (2011) conducted a research on 'Life Skills and Emotional Intelligence: Exploring the Relationship**'.** The investigators collected data from 450 male and 450 female higher secondary school students from Aizawl district, Mizoram. The result of the research study revealed that life skills of the higher secondary school students are positively correlated to their emotional intelligence, the five dimensions of life skills viz. self awareness, coping with stress, problem solving skills, decisions making skills and empathy showed significant positive correlation with the six dimensions of emotional intelligence viz. emotional stability, managing relations, integrity, self development, commitment and empathy. The result also showed that there was no significant difference between male and female higher secondary school students in their level of life skills.

Asmitaben (2012) explored life skills and academic anxiety of Higher Secondary school children from Anand district in Gujarat. A sample of 120 students 60 students from private and 60 from government schools were selected, 60 boys and 60 girls each from private and government schools. The findings showed that there was no significant difference in life skills of boys and girls of higher secondary schools. It was also found that there was a significant difference in the life skills of private and government higher secondary school students. Students from private schools have better life skills than government school students.

Lolaty et al. (2012) carried out an experimental research on the effectiveness of life skills training on emotional intelligence of the medical sciences students in Iran, the sample were selected and allocated into two groups: case group and control group, the two groups responded to Bar-on Emotional Quotient Inventory before starting the experiment. Life skills training were given to the case group. After the training Bar-on Emotional Quotient Inventory was responded by the case and control groups again. Their findings showed that the level of emotional intelligence after life skills training were significantly improved, while no significant difference was observed in the control group. They concluded that by performing programs such as life skills training, levels of emotional intelligence could be increased.

Khera and Khosla (2012) examined the core life skills of adolescents in relation to their self concept development through Yuva school skill programme. Samples of 500 adolescents were selected randomly from 500 adolescents studying in secondary classes of Sarvodaya schools in Delhi. The major findings of the study was that there was a positive co-relation between core affective life skill and self concept of adolescents which means those who posses these essential skills are better confidence in all aspects. After the analysis and interpretation of the data it was observed that there was a positive correlation between self concept of adolescent and their core affective life skills and it was also observed that there was a positive correlation between self concept and core cognitive life skills.

Atena and Narges (2014) investigated the effect of life skills training on physical and verbal aggression male delinquent adolescents marginalized in Karaj. In their experimental study, research design using pre-test, post-test and control group is applied. Three randomly selected regions were marginalized in Tehran adolescents examined with aggression questionnaire (AGQ) pre-tests. 60 persons of the delinquent adolescents who received score above the average in test aggressive adolescents were randomly replaced in experimental and control groups. During treatment experimental group received life skills instruction (included of: rage control, decision making, problem solving, self-knowledge, stress strategies and connection skills) in 14 sessions of 90 minutes in three month. Then both experimental and control groups are measured with (AGQ) post-tests. The results of covariate and repeated measures analysis show that life skills training have leaded to decreasing total aggression.

Kazemi et al. (2014) analyzed the effectiveness of life skill training on self-esteem and communication skills of students with dyscalculia in Ardebil city, Iran. The study was a quasi- experimental with pre-test/post-test and a control group. The 8 sessions (one hour) of life skills training were implemented for experimental group. The results showed that life skills training were significantly on increasing of self-esteem and communication skills. Students who were in experimental group had

a significant increase in the self-esteem and communication skills, than students of control group. The results indicated that life skills training can positively increase self-esteem and communication skills.

Mandeep (2014) evaluated life skills among school going adolescents in relation to certain personal variables. The sample consisted of 200 school going adolescents studying in government and private schools of Patiala, Fatehgarh Sahib and Mansa districts of Punjab. Life skills scale by Sharma (2003) was used to collect the data. The results found that female school going adolescents and rural school going adolescents possess more life skills than their counterparts; school going adolescents whose fathers and mothers are less educated possess significantly more life skills than their counterparts; school going adolescents who have business as parental occupation possess more life skills than their counterparts, and school going adolescents whose mothers are non-working possess significantly more life skills than those with working mothers.

Movallali et al. (2014)analyzed the effect of life skills training on social skills of hearing impaired students between 10 and 12 years old. They research employed the experimental method using pre-test and post-test design, with a control group. The samples were 38 male with hearing-impaired students, with sensory-neural hearing in the range of 50 to 90 decibels. They were selected from two schools for the deaf in Tehran province using a cluster sampling method. Subjects were randomly divided into an experimental group and a control group, each consisting of 19 students. The experimental group was subjected life skills training for 9 sessions, whereas the control group was not. The Wechsler intelligence test was used for matching the groups in their IQs, while their social skills rating scale was used for measuring their social skills. The research findings indicated that life skills training had a significant effect on the social skills and subscales in the experimental group, while in the control group no change was observed. Life skills training can improve the social skills of hearing impaired students. Training of life skills has a crucial role in improving the social skills of hearing impaired students and deserves to be given more attention.

Sandhu (2014) examined the life skills of pupil teachers. Survey method was used in the study. The stratified random sample comprised 300 pupil teachers from Karnal and Kurukshetra district. Percentage analysis showed that 4% of the respondents had high level of life skills, 72% of the respondents had average level of life skills and 24% of the respondents had low level of life skills. T-test analysis found that there was no significant difference in life skills between male and female and between rural and urban areas pupil teachers and there was significant difference in life skills between science and arts group pupil teachers.

Mallika and Radha (2015) studied the impact of family environment upon development of life skills and psychological hardiness among adolescent boys. The study was conducted on a sample of 300 male adolescents from eight schools studying in government and private schools of Rajasthan. Regression was used to study family environment components of expressiveness, conflict, acceptance, cohesion, independence, active recreational orientation, organization and control and total family environment as predictors of life skills and psychological hardiness among male adolescents. The correlation analysis indicated that life skills are significantly correlated with the eight dimensions of family environment except control dimension and also a significant relationship of control, challenge and global psychological hardiness with family environment and its dimensions was observed. The results of step-wise multiple regression revealed that only cohesiveness, active recreational orientation and organization dimension of family environment emerged as significant predictors of life skills among male adolescents.

Amit (2016) carried out a research on, 'A Study of Effectiveness of Life Skill Training of Training Programme on Self-Esteem of Teacher Trainees at B.Ed. Level – Pilot Study' on 80 teacher trainees from B.Ed. colleges affiliated to Mumbai University only. Teacher training college which easily granted the permission to conduct the study was selected; as the study was experimental samples were assigned to two groups randomly after pre-test. 40 samples in experimental group and 40 in

control group. Pre-test (Self-Esteem tool- Rosenberg Self-Esteem Scale') was administered to both the groups. Experimental group was exposed to life skill training by providing intervention/treatment through specially developed training programme. After the treatment, post-test was administered to both the groups – Experimental group and Control group. The effectiveness was determined through administration of pre-test and post-test as mentioned. Descriptive as well as inferential analysis was done. Microsoft excel analysis tool pack was used for data analysis. Findings of their study revealed that there was no significant difference between the mean scores of pre-test of experimental group and control group in self-esteem of teacher trainees at B.Ed. level. There was a significant difference in the post-test scores of the experimental and control groups in self-esteem of teacher trainees at B.Ed. level and there was a significant difference in the pre-test scores and post-test mean scores of the experimental group in self-esteem of teacher trainees at B.Ed. level.

Kumar (2017) conducted a qualitative study on 'Morality and Life skills: The need and importance of life skills education' and highlighted the necessary life skills, their effect on children's development and the way of implementation of life skills education during schooling. The investigator mentioned that life skills help in developing positive and flexible attitude for life among youngsters and all individual have inherent life skills but to get the best out of them we need training and get them shaped. The investigator pointed out that life skills are needed to develop a dynamic self image and self esteem improve communication skills, make better relationships and handle interpersonal problems , boost decision making ability and make informed decisions.

Saiedeh et al. (2017) conducted an experimental research on effect of training of life skills on social skills of high school students with intellectual disabilities with pre-test and post-test design from high school students with intellectual disabilities between 16-18 years of age who had enrolled in public schools in Tehran, Iran. Samples were divided into two equal number of groups (experimental and control group). The experimental group received life skill training in nine sessions, whereas control group did not receive any training. The data were analysed

by multivariate analysis of covariance using SPSS software. The results of MANCOVA showed that life skills training had a significant and positive impact on social skills in the experimental group, whereas there was no significant difference in the control group. They found out that life skill training had a significant and positive effect on cooperation, assertion and self-control skills in the experimental group.

Vijayarani and Geetha (2017) explored a study on life skills and value education among B.Ed. trainees. The sample of the study was 200 B.Ed. trainees in Coimbatore district, Tamil Nadu from 7 colleges. The data was analyzed using t-test and F-ratio. The findings of the study revealed that there was no significant difference between life skills and value education among B.Ed. trainees with respect to gender, location of the college, educational qualification, type of family, medium of instruction, nature of college, educational qualification of father, educational qualification of mother, occupation of father, occupation of mother, monthly income of father, and monthly income of mother.

Evangeline (2017) assessed the impact of life skills training on the emotional intelligence of high school students. The study result showed that the emotional intelligence quotient scores of female high school students were higher than male students. The emotional intelligence scores of Telugu medium students were higher than English medium students. The life skills scores of male high school students were higher than female students. The life skills scores of English medium high school students were higher than Telugu medium students. The life skills scores of urban students were higher than rural students. The life skills scores of students who live with their parents were higher than those with their guardians. The life skills scores of students of illiterate parents were higher than students of literate parents.

Nasheeda et al. (2018) examined a systematic review on a narrative systematic review of life skills education: effectiveness, research gaps and priorities to investigate the literature on effectiveness of life skills programs. The aim of this review was to gain a comprehensive understanding on the effectiveness of life skills education globally, and to identify research gaps and priorities. Findings revealed differences in life skills education within developing countries and developed countries. In general, developed countries conduct more systematic life skills education programs promoting positive behaviour, with research articulating outcomes on individual youth. Subgroup analysis indicated that life skills education activities conducted around the world reflect the priorities and areas of concern of the respective countries. For example, the USA, Canada, UK, Germany and Greece have many well-planned, tailor-made life skills education programmes that aim to promote positive behaviours around smoking, alcohol, drug abuse, HIV, AIDS, contraception, perception about sexual activities and condom use through refusal skills, attitude change and personal goal setting. Similarly, life skills education programs are popular in developing countries such as India, South Africa, Cambodia, Iran and Mexico. However, programs conducted in these countries often emphasize the development of communication skills, assertive skills, decision-making, building self-esteem, self-efficacy, reducing learning difficulties, decrease aggressive behaviour, anger control, and changing attitudes towards engaging in sexual behaviour.

Prasad (2018) researched 'Awareness of Life Skills among Senior Secondary School Students of East and South Districts of Sikkim'. Hypotheses was test on the different dimensions of life skills and concluded that there was no significant difference in self-awareness, critical thinking, creative thinking, decision making, effective communication, coping with emotions between boys and girls of senior secondary school students. There was a significant difference in problem solving skills, empathy, coping with stress and interpersonal relationship skills between boys and girls senior secondary school students, girls mean score were more than that of boys in problem solving, empathy, coping with stress and interpersonal relationship skills. No significance differences was found between government and private senior secondary school students on critical thinking skills, coping with stress, coping with

emotions, decision making skills, creative thinking skills, interpersonal relationship and effective communication skills.

Kelly et al. (2018)analyzed an action research across United States on 'Preparation for Adulthood: A Teacher Inquiry Study for Facilitating Life Skills in Secondary Education in the United States'. The action research was conducted in two large charter schools, One Tree High (OTH) and Two Tree High (TTH). One Tree High serves students with a variety of special needs; all students who attend OTH have an Individual Education Plan. Due to the large number of free and reduced lunch population, this school is considered a Title I school. OTH is predominantly comprised of a Caucasian and African American population. Two Tree High is a collegiate charter high school that provides students with rigorous technology-enhanced education programs, in preparation for college and career tracks. TTH has a large African American and Hispanic population, and is not considered a Title I school. They concluded their research findings as:

i. Planning life skills instruction can ease student and teacher frustration
ii. Realistic implementation is crucial in acquisition of life skills
iii. Social skills are a necessary component of life skills instruction.

Aswin and Biner (2019) evaluated a meta-synthesis (identifying, evaluating and interpreting) 13 research journals based on life skills education so that the authors get new concepts or deep new insights about Life Skills-Based Education Models. They concluded that the education model based on life skills through training can contribute to mental health, self-esteem, empathy, positive and flexible attitudes so that it affects the physical, mental and rational thinking aspects. Besides that, it can also help in developing self-confidence, emotional intelligence, improve critical thinking skills, improve communication skills, make better relationships and deal with interpersonal problems, can solve problems, reduce vulnerabilities and high risk behaviours, wiser, responsibility, time management and make positive decisions in the face of everyday.

Dayaprasad (2019) carried out a research study on life skills among B. Ed teacher trainees in relation to their intelligence and adjustment and found that 49.4% of the B.Ed. teacher trainees possess low level of life skills 37.0% had moderate level of life skills, and 13.6% had high level of life skills. The study also found that there was significant difference between the life skills of male and female B.Ed. teacher trainees, a comparison of their mean revealed that the mean scores of male B.Ed. teacher trainees were more than that of female B.Ed. teacher trainees which indicate male B.Ed. teacher trainees had better life skills. Male B. Ed teacher trainees had high decision making, coping with stress, coping with emotions and problem solving skills. The study showed that there was no significant difference between rural and urban, arts and science B.Ed. teacher trainees.

Sowmyashreeand Sreenivasa (2019) studied the 'Impact of Life Skill Training on Social Intelligence among Private School Adolescents,' 240 adolescents were taken as sample using random sampling technique. An exploratory design was used for the study. The study showed that the scores of private school adolescents have obtained higher mean values in the post test comparing to pre-test mean score. Studies revealed that private secondary school teachers being significantly more socially intelligent than government secondary school teachers. The results revealed that there was a significant effect of life skill training on social intelligence among private school adolescents. This shows that life skill training had an impacted on private school students and seen as they were more socially adjusted and developed more social skill as well as competency which is required to have a successful social life and showed that having leadership skill among them were increased after life skill training.

Sridevi (2019) evaluated the life skills of B. Ed students of Anantapur district, Andhra Pradesh. The investigator selected sample from 60 B. Ed students (30 male and 30 female) by employing simple random sampling technique. The result of the statistical analysis showed that there was significant difference between male and female B. Ed students in their level of life skills which revealed that female B.Ed. students had high level of life skills thanmale B. Ed students. The result also showed that there was a significant difference between rural and urban area of B.Ed students

with reference to their life skills, B.Ed. students belonging to urban had high level of life skills than B.Ed students belonging to rural area. The research result also indicated that there was no significant difference between government and private college B.Ed students in their level of life skills.

Sridevi and Amuthavalli (2019) investigated life skills among B.Ed. student teachers. Survey method was used for the study. The random sample comprised of 100 B.Ed. student teachers from Anantapur District, Andhra Pradesh. Self-made tool was used to collect the data. The data was analyzed by employing Percentage, Mean, SD, and t-test. The result found that B.Ed. student teachers had moderate level of life skills. The study also indicated that there was a significant difference in life skills among B.Ed. student teachers with reference to gender, finding revealed that female student teachers had higher level of life skills as compare to male student teachers. The finding of the study also revealed that there was a significant difference between rural and urban area of B.Ed. student teachers with reference to their life skills. Student teachers belonging to urban area had higher level of life skills as compare to student teachers belonging to rural area.

Das (2019) conducted a study of life skills in relation to academic anxiety of the B. Ed students of rural Kamrup district of Assam. A sample of 90 B. Ed students were selected from 3 teacher training college from Kamrup district. The data was analysed using statistical technique such as mean, standard deviation and t-Test. The findings revealed that the level of life skills and academic anxiety of B. Ed students are of average level and there exist no significant difference in life skills of male and female, graduate and post graduate, Science and Arts.

Krishna (2019) covered these important points in a book titled 'Life Skills among Children with Hearing Impairment'.

- The students with hearing impairment who underwent life skills training using a modular system had improved their level of life skills.
- The students with hearing impairment who underwent life skills training using conventional teaching also improved.
- The life skills of the hearing-impaired students who received modular-based life skills training improved more than those of their peers who received instruction using traditional methods.
- Background factors such age, hearing loss severity, kind of school, location, parent's educational status, and occupation had the least impact on the development of life skills in hearing-impaired children who attended modular training.

Vijayalakshmi (2019) explored on assessment of life skills development for sustainable development of B.Ed. teacher trainees. The objective of the present study was to assess the life skills development among the B.Ed. teacher trainees and to find out whether B.Ed. Teacher Trainees differ significantly in their level of life skills with respect to Gender, Locality, Type of Family and Qualification of Parents. The investigator used Life Skill Evaluation Inventory developed by MahboobehKhosravani, Mahmood Khosravaai& Abbas Khorashadyzadeh in 2014 for his study. It consists of 59 items with 5 point rating scale. Results of the findings showed that the level of life skills among B. Ed. teacher trainees was very high. The study revealed that there was no significant difference in the life skills of male and female B. Ed teacher trainees.

Lalhriatpuii et al. (2020) conducted a study on effect of family background on life skills of higher secondary school students in Mizoram. Using a stratified random sample technique, the researchers gathered information from 900 higher secondary school students (450 male and 450 female) from three different fields of study: arts, science, and commerce. The research study found that:

- There was no significant difference between male and female higher secondary school students in their total score of life skills.
- Male and female higher secondary school students in the arts stream exhibit significant differences. Males were shown to possess greater life skills than females. Examining male and female secondary school students, the investigators found that male students scored higher on aspects of life skills like coping and problem-solving skills.
- There was no significant difference between the different three stream viz. arts, science and commerce of higher secondary school students in Mizoram
- Three dimensions of the dependent variable (life skills), viz. empathy, problem-solving ability, and self-awareness skill, were found to be significantly correlated with each of the four dimensions of the independent variable (family background), viz. parent's occupation, and type of newspaper, social work, and social reputation. There was a negative association between the life skills dimension of empathy and the family background dimension of social participation.

Sowmyashree (2020) studied 'Effect of Life Skill Training on Social Intelligence and Emotional Intelligence among Adolescents'.It was found that private institution adolescent students performed better on life skills scale than government institution adolescent students, as private institutions reported they had few skills training programs in their extracurricular programs. It was found that private institutions management took care of personality development classes and other skills development classes. Students used to have extracurricular activities that made them more confident and better tackle social situations than government institutions' adolescent students. It was found that adolescent students from private institutions found better social adjustments and interpersonal relationship skills. It was found that adolescent students from private institutions showed more emotional intelligence compared to adolescent students from government institutions. It was found that life skills training given to adolescent students from government institutions have a great impact on their level of life skills.

George (2021) examined 'Life skills competence of high school students in relation to self-confidence and social intelligence' and it was found that English and Malayalam medium high school students have high level of life skills and social intelligence. The results showed that high school children whose parents who had completed school, college, or professional courses had high levels of social intelligence and life skill competency. Both male and female high school students were found to have high levels of social intelligence.

Bhatia (2021) conducted a study on academic anxiety of high school students in relation to their life skills and samples were taken from 50 high school students selected randomly from four high schools of 30 urban high school students and 20 rural high school student of Indore district. The research study found that there was significant difference in the life skills of rural and urban high schools students. Detailed analysis result of the various dimensions of life skills showed that high school students belonging to rural area had higher mean scores in problem solving skills, empathy, self-awareness, interpersonal relationship skills, coping with stress and critical thinking skills as compared high school students belonging to urban area. Majority of the students have moderate level of life skills and the study also revealed that students having better life skills have less academic anxiety. It was also found that that there was no significance difference in the life skills of government and private high school students.

Sarla et al. (2022)analyzed the life skills and educational adjustment among adolescents in Sonipat district, Haryana. The investigators collected data from 200 students from Sonipat district, 50 male and 50 female, 50 private school students and 50 government school students and 50 students belonging to urban area and 50 students belonging to rural area. The investigators analyzed the data using descriptive statistics. The findings of their study showed that there was no discernible difference between male and female students in their level of life skills. The survey also revealed that there was no discernible difference in the level of life skills taught in private and public schools.

2.2. Studies related to Social Intelligence

Kaukiainen et al. (1999) conducted a research study on 'The Relationships between Social Intelligence, Empathy, and three types of Aggression'.Peer-estimation techniques were used to measure all major variables. A number of 526 Finnish school children from three age groups (10, 12, and 14 years old) participated in the study. They found that:

- A significantly positive relationship between social intelligence and indirect aggression
- Direct forms of aggression that are verbal and physical, were not related with social intelligence
- Empathy mitigated aggressive behaviour and the perpetrator of aggression must have a certain amount of impudence and insolence
- Although empathy and social intelligence were correlated phenomena, it was meaningful to make a distinction between them at least in research on aggression.

Rani and Shaili (2017) assessed on the relationship between social intelligence and adjustment among under graduate students. A sample of 200 students male and female under graduate were taken purposively. The investigators used two scales for collecting data i.e. Social Intelligence Scale by N.K. Chadha and UshaGanesan and Adjustment Inventory for College Students by Prof. A.K.P. Sinha and Prof. R.P. Singh. Investigators found that there was no significant difference in the level of social intelligence on the basis of gender but there was significant difference on the .basis of residence i.e. day scholars and hostellers. The result also showed that the mean score of day scholar was higher than the mean score of hostellers which means the social intelligence of day scholars is higher than hostellers. The investigators found high positive correlation between social intelligence and adjustment which predict that if social intelligence increases then adjustment will increase and vice-versa.

Arora and Kaur (2018) investigated the social intelligence of senior secondary school students in relation to their mental health and parenting behaviour style in 300 students of class XII in six government and private schools from Jalandhar district. The investigators made used of Mental Health Battery developed and validated by Arun Kumar Singh and Alpana Sen Gupta, Social intelligence Scale by N.K. Chadha and UshaGanesan and Parenting Style Questionnaire by DeepaSikandKauts The result of their study showed that senior secondary schools students having good mental health had high social intelligence and students having poor mental health had low social intelligence and senior secondary schools students receiving mixed parenting style (authoritative parenting style, authoritarian parenting style and permissive parenting style) had high social intelligence and senior secondary schools students receiving permissive parenting style has low social intelligence.

Bhattacharyya and Sanghamitra (2018) conducted a study on 'A relationship study on social intelligence and teachers' behaviour in classroom'. The investigator selected 130 secondary school teachers located in North 24 pgs. district of West Bengal by employing simple random sampling technique. The research study found that:

- There was no significant difference exists between male and female of secondary school teachers in their level of social intelligence.
- There was no significant difference exists between the various age groups of the secondary school teachers in their level of social intelligence.
- There was no significant difference exists between social intelligence of secondary school teachers and their behaviour in classroom. They do not depend on each other

Kharluni and Erigala (2018) investigated social intelligence and social competence of higher secondary students of Mylliem block in east Khasi hills district of Meghalaya. There are 22 (9 government aided and 13 private) higher secondary schools in Mylliem Block. Their study population consists of 3423 students (1533 male and 1890 female students) and 216 higher secondary students (108 boys and 108

girls) were taken as sample from 12 schools. Their research study revealed that higher secondary students of Mylliem Block had an average level of social intelligence and there was no significant difference between government aided and private higher secondary students of Mylliem block regarding social intelligence. The result also showed that there was no significant difference in male and female higher secondary students in of Mylliem bock in their level of social intelligence. The correlation analysis of their study showed that there was no significant relationship between social intelligence and social competence of higher secondary students of Mylliem Block.

Habeeb (2019) conducted a study on dimension-wise analysis of social intelligence and suggestions to enhance social skills in adolescents. A sample of 200 students studying at higher secondary stage (English medium science stream students) of Aurangabad city was selected through random sampling technique. The findings revealed that the students have average social intelligence. Out of the eight dimensions the findings of the study showed that the level of sensitivity, sense of humour and Memory of adolescents students studying in the higher secondary level of Aurangabad city was high; the level of Cooperativeness, Memory, Recognition of Social Environment and Tactfulness of adolescents students studying in the higher secondary level of Aurangabad city was average and the scores obtained for Patience and Confidence level falls under the category of low level in the adolescents students studying in the higher secondary level of Aurangabad city.

Bhalerao (2020) conducted a research study on 'A Comparative Study of Social Intelligence of Players and Non-Players of Vidarbha Region'. Samples were taken from 540 players and 540 Non-players randomly selected from SantGadge Baba Amravati University, Amravati and RashtrasnatTukdojiMaharaj Nagpur University, Nagput of Vidarbha region between the ages of 18 to 25 years old. The data of their social Intelligence was obtained by using questionnaire developed by N.K. Chadha and UshaGanesan. Detailed study of the various dimensions of social intelligence showed that there was a significant difference in various dimensions of social

intelligence of players and non-players. The investigator analysed the various dimensions of social intelligence of players and non-players. The result showed that:

- The patience of players are stronger than that of non-players
- The co-cooperativeness of players are weaker than that of non-players
- The confidence level of players are stronger than that of non players
- The sensitivity of players are weaker than that of non-players
- The recognition of social environment or stronger in players than that of non-players.
- The tactfulness of players is weaker than that of non players.
- The sense of humour of players is weaker than that of non players.
- The memory of players is stronger than that of non-player

Sergrin and Flora (2000) explored 'Poor social skills are a vulnerability factor in the development of psychosocial problems'. Sample consisted of 118 students who were moving at least 200 miles away from their home town and making the transition to their first semester of college. The researchers pointed out that people's communication skills had a significant role in determining their reaction on how will they react to main life transitions and stressful events that often accompany such transitions. The research study highlighted that social skills are negatively predictive of changes in depressions, loneliness, and social anxiety over time, social skills are moderately related with the experience of stressful events and depression as well as between stressful events and loneliness and people with particularly sound social communication skills appear to be resilient to the ill effects of stressful life events.

Kajal (2002) examined 'Emotional intelligence: An Investigation of Construct Independence from Personality and Social Intelligence'. A sample of 286 (162 male and 124 female) were taken randomly from various undergraduate and post-graduate classes in Govt. College, Gurgaon; Govt. College, Bhiwani; University College and University Teaching Departments, KUK. The selected sample covered the people from low socioeconomic status to upper middle socioeconomic status. The result of

the study showed that emotional intelligence was found associated with social intelligence and social intelligence demonstrated significant relationship with personality.

Barbera et al. (2003) studied 'Relating Emotional and Social Intelligence to Sex and Age'. A total number of 416 undergraduate psychology students (133male and 283 female) from Las Vegas were taken as sample. Hierarchical multiple regression was used to access whether there was a relation between the variables and whether the relationship was the same for male and female. They found that: there was a significant positive relationship between expression grouping and age; there was same relationship for both men and women; social translations had a positive relationship with age and no variances were found between male and female; cartoon predictions had no relationship with age and no variances were found between male and female; missing cartoons had insignificant relationship with age; while adding sex with age then the regression weight for age was significant.

Caplan (2003) examined preference for online social interaction: A theory of problematic internet use and psychosocial well-being, where the researchers used cross-sectional survey, in which 386 graduate students' participants in, to measure their preference of online interaction and the negative results of internet use. Participants completed measures of preference for online social interaction, depression, loneliness, problematic Internet use, and negative outcomes resulting from their Internet use. Results indicated that psychosocial health predicted levels of preference for online social interaction, which, in turn, predicted negative outcomes associated with problematic Internet use. In addition, the results indicated that the influence of psychosocial distress on negative outcomes due to Internet use was mediated by preference for online socialization and other symptoms of problematic Internet use. The results support the study hypothesis that that individuals' preference for online, rather than face-to-face, social interaction plays an important role in the development of negative consequences associated with problematic internet use.

Stone (2006)analyzed the moral dimensions of human social intelligence: domain-specific and domain-general mechanisms. It was argued that when the abstract cognitive abilities for recursion and meta-representation, which are uniquely human, interact with the older social abilities (empathy, inter subjectivity) human beings are able to read abstractly about others' mental states and how they affect them. The study concluded that it was these abstract cognitive capacities that give people the ability to be both cruel and compassionate, but it was the ability for empathy that keeps them moral.

Yip and Martin (2006) researched on 'Sense of humour, Emotional Intelligence and Social Competence' examined associations among sense of humour, emotional intelligence (EI), and social competence, 111 undergraduate students were examined using measures of humour styles, trait cheerfulness, social competence, and an ability test of emotional intelligence. They found that:

i. Some positive humour styles are positively related to some types of social abilities and components of emotional intelligence
ii. Negative humour styles are negatively related to other interpersonal competencies and emotional intelligence facets
iii. The absence of maladaptive styles of humour may be just as important as the presence of positive styles in social competence and emotional intelligence
iv. The interpersonal competencies may partially account for recent findings of positive correlations between the emotional management facet of emotional intelligence and the quality of interpersonal relationships.

Gnanadevan (2007) conducted a research study on 'Social Intelligence of Higher Secondary Students in Relation to their Socioeconomic Status' and found that higher secondary students have high social intelligence and gender does not have significant difference. Students belonging to different castes showed significant difference in their social intelligence. Fathers' education and Mothers education does not show any relation with the social intelligence among the student. Parents'

occupation also does not show influence on the social intelligence of students however, parents' income does show significantly difference in the level of Social Intelligence among the higher secondary school students.

Weis and Su (2007) conducted a study on 'Reviving the search for social intelligence: A multi-trait- multi method study of its structure and construct validity'. The objects of their study were twofold. First, they intended to demonstrate the multidimensionality of social intelligence. They postulated three cognitive ability domains (i.e., social understanding, memory, and knowledge). These domains were operationalized in a multitrait-multimethod design applying verbal, pictorial, and video-based performance measures. Secondly, they intended to demonstrate that social intelligence can be differentiated from academic intelligence. One hundred eighteen high school and first year psychology students (mean age 19.7 years) were tested. The result of the correlation and regression analysis yielded generally low validity coefficients between social and academic intelligence except for the social memory tests.

Jeloudar and Yunus (2011) explored social intelligence level among teachers in government secondary schools in Malaysia in light of some demographic variables and to know the correlation between teachers and classroom control strategies social intelligence. Their study results showed that teacher in government secondary schools had moderate level of social intelligence. Their study also showed that with the increase of teacher's age in government secondary schools, their level of social intelligence also increases. According to the statistical analysis of the study, there is a positive correlation between teachers' social intelligence and recognition or reward, hinting, discussion, and involvement. However, there is a negative and moderate relationship between teachers' social intelligence and aggression, as well as a low correlation between teachers' social intelligence and punishment.

Soleiman and Aida (2011) analyzed the social intelligence level of teachers employed in government secondary schools in Malaysia based on selected demographic variables such as age, and how they relate to the classroom discipline strategies used. The sample of the study comprises of 203 teachers. Their findings revealed that there were significant differences between teachers' age groups and their social intelligence. Further a significant relationship was noted between teachers' social intelligence and the six strategies of classroom discipline strategies (discussion, recognition, involvement, hinting, punishment and aggression).

Jeloudar et al. (2012) examined the influenced of social intelligence of secondary school teachers from India, Malaysia and China on classroom discipline strategies. The result of the study showed that school teachers from India, Malaysia and China had moderate level of social intelligence. Statistical analysis showed that there was a significant difference in their level of social intelligence among teachers from India, Malaysia and China, a comparison of their mean scores indicated that India had higher level of social intelligence as compared to Malaysia and China; Malaysia had higher level of social intelligence as compared to China.

Maltese et al. (2012) assessed self-esteem, defensive strategies and social intelligence in the adolescence. The aim of their study was to explore the proactive and retroactive excuses used by adolescents and their relationship with Self-Esteem and the Social Intelligence's domains. The subjects in their study were 786 attending the 3th or the 5th final years of high school (humanistic, scientific, technical and pedagogic schools) with the mean age of 17.2 years. The result of their study showed that:

- Social intelligence had significantly positive correlation with self-esteem and significantly negative relationship with proactive excuses.
- The positive self-worth has a pivotal role for one's general well-being, and adaptation degree to its social context.

- Socially intelligent adolescences with greater level of self–esteem are more able to analyze the social behaviour of others, able to recognize their motives and cognitive, and produce adequate behaviour for its social context.
- Males adolescent had higher self-esteem than females adolescent.

Sembiyan and Visvanathan (2012) conducted a comparative research on social intelligence of 1050 college students from Cuddalore, Villupuram, Nagapattinam, Thanjore, Vellore and Thiruvannamalai districts of Tamil Nadu, India. The major findings are:

- There was a significant variance in the mean score of social intelligence of boys and girls college students.
- There was no significant variance in the social intelligence of urban and rural college going students.
- There was a significant variation in the social intelligence of private and government college students.
- There was no significant variation in the social intelligence of the college students belonging to nuclear and joint family.
- There was no significant variance in the social intelligence of college students in relation to their graduation stream i.e. arts and science

.

Gray et al. 2013 in their research study sought to understand how first-year college students' use of facebook affected their ability to adjust socially and remain focused on their studies. For the study's purposes, the researchers utilised a survey design in which 338 students from a private university in the United States responded to questionnaires about their usage of facebook and a measure of their college social adjustment. The findings revealed that college students' use of facebook and the number of friends they had there had an impact on their ability to collaborate with classmates as well as their social adjustment at the institution.

Sumanlata and Rajat (2013) investigated social intelligence of undergraduate students in relation to their gender and subject stream to examine the social intelligence of male and female undergraduate students of Science and Arts subject streams studying in various degree colleges of Bhilai city, Chhattisgarh. A number of 120 (60 male and 60 female) undergraduate students of science and arts were taken as sample. The findings of gender analysis indicates that female student's possess more social intelligence than male students and analysis of stream indicates that arts students were having greater social intelligence than students of other streams. Detailed analysis of their study on the various dimension of social intelligence revealed that female undergraduate students have more patience and sensitivity, better cooperativeness and recognition of social environment than male undergraduate students. Their study showed that confidence level, tactfulness, sense of humour and memory are the dimensions in which males and females do not have any significant difference.

Sumanlata and Rajat (2013) studied social intelligence of undergraduate students in relation to their gender and subject stream studying in various degree colleges of Bhilai city, Chhattisgarh. The study was conducted to know the social intelligence of male and female undergraduate students of science and Arts subject streams studying in various degree colleges of Bhilai city, Chhattisgarh. 60 male and 60 female undergraduate students were selected, for the sample by adopting stratified disproportionate random sampling technique. The data was collected by using Social Intelligence Scale constructed and standardized by Chadda and Ganesan. The data was analysed by using 't' test. Their findings of gender analysis indicated that female students possess more social intelligence than male students and analysis of stream indicates that arts students were having greater social intelligence than students of other streams.

Bsharah et al. (2014) evaluated Jordanian university students' use of facebook and their perceptions of their social intelligence as well as the relationship between students' use of facebook and a self-reported measure of their social intelligence. The participants in their study were 282 students from different colleges

in a Jordanian public university. The researchers used cross-sectional survey design in which a questionnaire was administrated and collected in class by number of faculty members, who agreed to have their classes participating in this study, the questionnaire aimed to collect data regarding students' use of facebook as well as the perceptions of their social intelligence. The analysis of their collected data showed that the majority of the students were active facebook users and participants' perceptions of their level of social intelligence were positive and at moderate level. Their findings showed significant association between facebook use and perceived level of social intelligence among Jordanian university students. Their research study mentioned that the use of facebook benefit students' social competencies and intelligence, through providing them with electronic platform that they can use to freely express themselves.

Dixit and Kaur (2015) conducted a research study on**,** 'Study of Social Intelligence and Adjustment among Pupil Teachers in Relation to their gender and Locality'. The sample consisted of 160 pupil teachers of B. Ed. colleges of education falling in two districts of Punjab i.e. Ludhiana and Moga, from which 80 males and 80 females from rural and urban areas were selected. The research findings are:

- There was no significant difference in the level of social intelligence of male and female pupil teachers.
- There was no significant difference in the level of social intelligence of rural and urban pupil teachers. A comparison of their mean scores showed that rural pupil teachers had higher mean score than urban pupil teachers.
- It was found that social intelligence and adjustment level were positively correlated. One variable affects another variable, if the level of social intelligence increases the level of adjustment increase.

Arthi and Tamilselvi (2016) studied the socialintelligence of B. Ed student teachers in Namakkal district. The sample consisted of 724 B.Ed. student teachers from ten Colleges of Namakkal District selected by random sampling technique. The findings of the study revealed that:

- There was no significant difference in the level of social intelligence of B.Ed. student teachers based on gender.
- There was significant difference in the level of social intelligence of B.Ed. student teachers based on locality. A comparison of their mean scores showed that the mean score of B. Ed student teachers belonging to urban area had higher mean score as compare to B. Ed student teachers belonging to rural area.
- There was no significant difference in the level of social intelligence of B.Ed. student teachers based on medium of instruction (Tamil and English).
- There was no significant difference between male and female B.Ed. student teachers on the seven dimensions given in the Social Intelligence scale viz. Cooperativeness, Confidence, Sensitivity, Sense of Humour, Tactfulness and Memory while there was significant difference between male and female B.Ed. student teachers on one dimension i.e. Patience, a comparison of their mean score showed that female B.Ed. student teachers had higher mean score which means that female B. Ed student teachers had more patience than male B. Ed student teachers.
- Rural and urban B. Ed student teachers differ significantly in their Social Intelligence Domain on Memory. B.Ed. student teachers belonging to urban area had strong memory as compared to B. Ed student teachers belong to rural area. Rural and urban B.Ed. student teachers do not differ significantly in their Social Intelligence Dimensions such as Patience, Cooperativeness, Confidence, Sensitivity, and Sense of humour and Tactfulness.

Tiakala (2016)analyzed the relationship of social intelligence with personality traits and life skills of the higher secondary school students of Nagaland. The researcher collected sample from 11 randomly selected schools, 314 boys and 312 girls. Pearson's product moment coefficient of correlation was used to find out the relationship among the variables. The research finding revealed that the personality traits was not significantly related with social intelligence and life skills, however, social intelligence was significantly related with life skills. Social intelligence and life skills do not differ significantly between boys and girls.

Rani (2016) studied 'Social Intelligence of B.Ed. Students in Relation to their Gender and Locality'. A sample of 200 students of different educational college of Fazilka district was taken randomly. Social Intelligence Scale by N.L. Chadha and UshaGanesan (2009) was used to assess the social intelligence of B. Ed students. From the research findings the researcher concluded that:

- There was no significant difference between social intelligence of male and female B.Ed. students.
- There exists significant difference between social intelligence of urban and rural B. Ed students. A comparison of their mean scores showed that B. Ed students belonging to rural area had higher mean score as compared to the mean score of B. Ed students belonging to urban area.

Afzalur et al. (2018) examined a process model of social intelligence and problem-solving style for conflict management. Data on social intelligence and problem solving were collected from Kentucky, USA. Sample were taken from 406 faculty members from one selected public university, and the data were averaged by departments; this resulted in a sample of 43 departments, and all the data analyses were performed with these samples of 43. Data analyses with LISREL at the department level suggest that social intelligence was positively associated with problem solving.

Akbar and Jafar (2018) investigated the relationship between optimism, social intelligence and positive affect with students' life satisfaction. The sample included 332 students (213 females and 119 males) from Payame Noor University– Tabriz branch, who were randomly selected using stratified and multiple-stage cluster sampling. The results of Pearson's correlation analysis indicated a positive correlation between social information processing, social skills, optimism, positive effect, and life satisfaction. Furthermore, the results of hierarchical multiple regression analysis also indicated the direct effect of social information processing and social skills on life satisfaction that later disappeared when optimism and positive affect were introduced in the second step. In the final model, only measures of optimism and positive affect

were statistically meaningful. Therefore, social intelligence and positive affect promote life satisfaction in university students.

Bhattacharyya and Gayen (2018) examined a relationship of social intelligence and teachers' behaviour in classroom. The investigators collected data from West Bengal secondary school teachers by employing simple random sampling technique. Their findings revealed that there was no significant difference between male and female secondary school teacher in their level of social intelligence. The results also showed that there was no significant difference in the level of social intelligence among various age groups. The Pearson correlation result showed that there was no significant difference exists between social intelligence of secondary school teachers and their behaviour in classroom, they do not depend on each other.

Asgharet et al. (2019) conducted a research on gender, age and locality based social intelligence differences of B. Ed students. Data were collected from all 150 students enrolled in semester 8 and 4 BS education course in four public sector universities of Khyber Pakhtunkhwa (KP). Sample consisted of 71 female and 79 male. Data were analysed based on ANOVA test and independent sample t-test through SPSS. Their research study revealed no significant gender and locality-based difference in social intelligence. Their research study also revealed that social intelligence increased with increasing age. Their research findings also showed that age impacted the growth of social intelligence.

Bayer andBayram (2019) investigated the relationship between social intelligence, computer anxiety and personal development initiative skills in students. It was found that there was a significant relationship between the social intelligence and personal development initiative skills of students who were studying in the field of health sciences and the social intelligence and computer anxiety and personal development initiative in the students who were studying in the social sciences. The level of anxiety was found to be lower than that of the students in the social sciences.

Hadiya (2019) conducted a study on the relationship between professional ethics and social intelligence of college teachers. A sample of 200 college teachers was randomly selected. The results showed that there was no significant difference in the professional ethics means scores of male and female college teachers. The study also showed that there was a significant correlation between the professional ethics and social intelligence of college teachers, which means that higher the professional ethics, higher will be the social intelligence and vice versa.

Anbalgan and Kasirajan (2020) studied the relationship between social intelligence and social media among 300 student teachers from different B. Ed college from Tirunelveli district in Tamil Nadu. The result of their study revealed that 15.7% of student teachers had low level of social intelligence, 69% of student teachers had moderate level of social intelligence and 15.3% of student teachers had high level of social intelligence. The result also showed that there was no significant relationship between the level of social intelligence and competencies of social media of student teachers.

Compendio (2020) conducted a study on 'Emotional, social intelligence and Performance of Teachers' on 101 full-time teachers of Saint Michael College of Caraga. The results showed that full time teachers of Saint Michael College had high emotional intelligence, average social intelligence and high teaching performance. The result also showed that there was no significant relationship between emotional and social intelligence of teachers to their teaching performance.

Kamil and Bilal (2020) examined the relationship between social intelligence levels and communication skills of social studies teacher candidates in Turkey. Tromso social intelligence scale (TSIS) and communication skills scale developed by

Korkut Owen and Bugay (2014) was used to collect data. Their investigation result showed that social studies teacher candidates had high communication skills and appropriate level of social intelligence. The result of their findings also revealed that female social science teacher candidates had significantly higher level of social intelligence and communication skillsthan male social science teacher candidates.

Uygun et al. (2020) investigated the 'Relationship between Social Intelligence Levels and Communication Skills of Prospective Social Studies Teachers'. The purpose of their study was to examine the relationship between social intelligence levels and communication skills of pre-service social studies teachers. The sample of the study consisted of the third and fourth year students who study Social Studies Teaching at Faculties of Education at Mugla, Usak, Afyon and Aksaray Universities. In their study, the unpaired t-test, the one-way analysis variance (ANOVA), the Scheffe and Games-Howell test have been used. To reveal the relationship between social intelligence levels and communication skills of pre-service social studies teachers, the Pearson product-moment correlation analysis has been used. The research study found that pre-service social studies teachers demonstrate high communication skills, but moderate social intelligence. It was also determined in their research study that there was a moderate, linear, positive and meaningful correlation between the communication skills and social intelligence levels of pre-service social studies teachers. The study showed that female pre-service social studies teachers had higher level of social intelligence as compare to male social science teachers. In addition to these, the results revealed that communication skills and social intelligence levels of pre-service teachers differ to a significant extent according to factors such as universities they attend and the number of books they read per month. On the other hand, their research finding showed that their age and grade did not cause a significant difference in the communication skills and social intelligence levels of pre-service teachers.

Kaur et al. (2021) studied the social intelligence of 400 pupil-teachers who enrolled in B.Ed.co-educational colleges in selected districts of Punjab.The social intelligence scale by N. Chadha and UshaGanesan was administrated to collect the

data. The results of their study demonstrated that there was no significant difference in the level of social intelligence of males and females B. Ed students of Punjab. The study of their results also revealed that there was no significant difference between B. Ed students from humanities and science groups. Detailed analysis of the various dimensions of social intelligence of their study showed that there was a significance difference between male and female B. Ed students of Punjab. Male B. Ed students of Punjab had higher mean scores as compare to female B. Ed student of Punjab in the social intelligence scale dimensions of recognition of social environment, tactfulness, sense of humour and memory whereas female B. Ed students of Punjab had higher mean scores as compare to male B. Ed student of Punjab in the social intelligence scale dimensions of patience, cooperativeness and confidence.

Adwan and Husayn (2022) examined 'Social Intelligence among teaching staff at Princess Rahma University College and its relationship to student's interaction with the educational topic from students of Princess Rahma University College point of view' and found that the teaching staff at Princess Rahma University College had high level of social intelligence and there was a correlation between teaching staff social intelligence and students' interaction with scientific subject. The findings of the research study also showed that there was a correlation between social intelligence and social interaction of teaching staff.

2.3. Studies related to ICT Competencies

Beastall (2006) conducted a research study on 'Enchanting a Disenchanted Child: Revolutionising the Means of Education Using Information and Communication Technology and e-learning' examined the effect of the development of ICT on teachers and pupils, and questions the government's motivation for change. The introduction of ICT has not been followed by professional development for teaching staff in the pedagogy of ICT across the curriculum and may have merely served to reinforce the generational digital divide. The government may have alienated the teachers in their process of enchanting the pupils. It was suggested that the Department for Education and Skills should lay more emphasis on developing

strategies and providing funding for solutions to gaps in the professional development of teachers in their pedagogical understanding of ICT across the curriculum.

Wozney et al. (2006) studied 'Implementing Computer Technologies: Teachers' Perceptions and Practices' in Montreal, Canada. They investigated into the students' personal traits, the classroom environment, the teacher's perspective, and the ICT tools employed. According to the study, the expectation of success and perceived value were the key factors in differentiating among teachers' levels of computer use. Personal computer use outside of the context of teaching activities was also found to be the most important predictor of teachers' use of technology in the classroom. Finally, teachers used computers primarily for informational purposes.

Inoue (2007) studied university student's perception of computer technology experiences on 174 male and female students from University of Guam. To collect data, likert-scale instrument was created by the investigator. In a university in the western Pacific, 174 students taking education courses were given a survey questionnaire. Four factors were taken into consideration: age, gender, ethnicity, and academic status. The majority of the sample's students had favourable opinions on utilising computers. However according to the result of the analysis of variance (ANOVA) results, none of the four factors were statistically significant. The sample's perceptions of technology encounters were unaffected by gender, race, academic status, or age.

Tondeur et al. (2007) carried out an investigation on curricula and the use of ICT in education: Two worlds apart? In Flanders, the education government has identified and defined a framework of ICT competencies for expected outcomes, related to knowledge, skills and attitudes that pupils are expected to achieve at the end of primary school. The researchers examined whether teachers are using ICT in accordance with the competencies proposed by the Flemish government. A stratified sample of 60 schools was drawn from schools in Eastern Flanders, one of the five Flemish provinces. The main finding of the study was that teachers in primary

education still stress to a large extent on technical ICT skills. ICT competencies focusing on supporting the learning process and social and ethical components reflect lower priority levels. This means that the actual educational practice was still not in line with the ambition of the Flemish government to integrate ICT into the learning process (educational catalytic rationale).

Rafi and Muhammed (2008) carried out an exploratory study to study the use and impact of Information and Communication Technologies (ICT) on Small and Medium Sized Enterprises (SMEs) in Oman. The study investigates ICT infrastructure, software used, driver for ICT investment, perceptions about business benefits of ICT and outsourcing trends of SMEs. They found that ICT usage within SMEs in Oman was moderate in common technologies, but limited in the more sophisticated technologies such as wireless, data storage and network security solutions. The results of the study showed that only a small number of SMEs in Oman are aware of the benefits of ICT adoption. The main driving forces for ICT investment are to provide better and faster customer service and to stay ahead of the competition. A majority of surveyed SMEs have reported a positive performance and other benefits by utilizing ICT in their businesses. Majority of SMEs outsource most of their ICT activities. Lack of internal capabilities, high cost of ICT and lack of information about suitable ICT solutions and implementation were some of the major barriers in adopting ICT.

Cavas et al. (2009) assessed science teachers' attitude towards Information and Communication Technology use in education in Turkey. In order to collect data, an instrument (STATICTE) was developed by researchers and administered to 1071 science teachers almost uniformly distributed in 7 geographic regions of Turkey. In data analyses, descriptive statistics were used to describe and summarize the properties of the mass of data collected from the respondents. Their research findings showed that science teachers have a positive attitude towards use of ICT in education. It was also found that the teachers attitude towards using ICT do not differ based on their gender.

Goktas et al. (2009) conducted a study on 'Main Barriers and Possible Enablers of ICTs Integration into Pre-Service Teacher Education Programmes' in Turkey. Samples were taken from 53 deans in schools of teacher education (STE), 111 teacher educators, and 1,330 prospective teachers. The findings of the study indicated that majority of the stakeholders believed that lack of in-service training, lack of appropriate software and materials, and lack of hardware were the main barriers for integrating ICTs in pre-service teacher education programmes.

Kim et al. (2009) studied 'Loneliness as the Cause and the Effect of Problematic Internet Use: The Relationship between Internet use and Psychological Well-being'. The researchers used cross sectional survey to measure students' favourite online activities and some psychological problems. The total number of participants was 635 university students from two American universities. The results showed that there were significant relationship between the use of social networking sites and unhealthy offline social skills. The study showed that individuals who were lonely or did not have good social skills could develop strong compulsive Internet use behaviours resulting in negative life outcomes (e.g., harming other significant activities such as work, school, or significant relationships) instead of relieving their original problems.

Khan (2009) carried out a research study on 'Information and Communication Technology (ICT) in Teacher Education in the Central of Globalization: Had good perception on the Developed Countries have Very High Technical Oriented Curriculum than India has'. Personal interviews and discussions were conducted among the teacher educators who are handling ICT in college. The study revealed that there was a wide gap between ICT curriculum and changing needs of the society taking things on a global perspective. The teachers were not competent enough to handle ICT based subject in teacher training colleges and there was no specialist teacher to handle the ICT based teaching.

Yuksel et al. (2009) examined K-12 teachers' ICT competencies and the contributing factors in acquiring these competencies. Their research study investigated K-12 teachers' ICT competence level, the difference in teachers' ICT competence based on their demographic characteristics, and factors that have an impact on their ICT competences. The samples were collected from 1,429 K-12 teachers by means of a questionnaire. Their findings indicated that the majority of the participants do not perceive themselves as competent in basic and advanced ICT. Gender, prior pre-service education ICT courses, and computer ownership are significantly related to the perceived ICT competences of K-12 teachers. Personal interest, possession of a home computer, family and friends were rated as the most influential factors in acquiring ICT competences.

Ojiegbe (2010) investigated the IT proficiency of the library staff at the Universities of Jos, Plateau State, and Abuja, Federal Capital Territory. The research's findings showed that while the majority of university libraries' library personnel could make online searches utilising the internet and complete Microsoft word-based functions like typing and printing papers, they were unable to carry out effective professional library-related jobs. The researchers have stressed that staff members need ICT competencies that will enable them to perform job-related tasks, such as internet proficiency, command of library software, and technical skills.

Erdogan (2010) conducted a study on attitudes and knowledge level of teachers in IT use: The case of Turkish teachers to determine teachers' influence on the use of information communication and technology (ICT) at schools. Various variables are examined such as years of experience, gender, the duration of computer and internet use, level of knowledge and frequency of IT use among teachers. The result revealed that the most commonly used and well-known IT among teachers are the internet, e-mail and word processing and teachers' attitudes towards computers and internet are generally positive. It was also found that their attitudes vary with their years of experience and levels of knowledge.

Al-Zaidiyeen et al. (2010) investigated the level of ICT use for educational purposes by teachers in Jordanian rural secondary schools. The data for their study was collected through the use of qualitative technique; a questionnaire was distributed to 650 teachers in Jordan. The survey included questions concerning the level of ICT use as well as attitudes of teachers towards the use of ICT. The result of their study, which was obtained by analyzing the data collected revealed that teachers in Jordanian rural area had low level of ICT use for educational purpose, teachers in Jordanian rural area hold positive attitudes towards the use of ICT in education. The investigation results also showed that there was a significant positive correlation between teachers' level of ICT use and their attitudes towards ICT.

Brun and Hinostroza (2011) studied 'Learning to Become a Teacher in the 21st Century: ICT integration in Initial Teacher Education in Chile' with an aim to contribute for developing more innovative and better quality in pedagogical practices in the educational level in their study 'Learning to become a teacher in the 21st century: ICT integration in initial Teacher Education in Chile'. The existence of institutional policies; the overall infrastructure, the availability and access to ICT resources, and the availability and quality of technical and pedagogical support have reached adequate levels. But although teachers show high self-reported levels of comfort and confidence for using ICT, they lack competencies in the field of ICT integration and confirming the importance to teach future teachers how to effectively integrate ICT in teaching and learning.

Teck and Lai (2011)analyzed 'An Empirical Analysis of Malaysian Pre-university Students**'** ICT Competency Gender Differences. The research indicated that there are no significant gender differences in terms of word processing, presentation, spreadsheet, World Wide Web, email, database, social networking and utility competency among the pre university students. However, it was found that there was a significant difference in terms of PC maintenance competency. Furthermore, there are no significant gender differences in terms of computer usage and computer experience. The research also revealed that English proficiency has a positive correlation with the ICT competencies.

Yusuf and Balogun (2011) explored 'Student-Teachers' Competence and Attitude towards Information and Communication Technology: A Case Study in a Nigerian University' found that:

- Majority of the student-teachers had positive attitude towards the use of ICT and they were competent in the use of few basic ICT tools.
- No significant difference was established between male and female student-teachers' attitudes and use of ICT.
- Student-teachers lacked the necessary competence in the full integration of ICT in the curriculum.
- It underscores the need to improve the ICT contents of teacher education programs in universities in developing nations.

Dhawan (2012) studied 'Influence of ICT competencies on Life Skills in relation to Vocational Preferences of Higher Secondary school students'. The sample consisted of 61 respondents which include 48 teachers, 12 principals in 12 ICT model secondary schools in Kisumu County and 1 County quality assurance officer. The research findingsrevealed that boys were found to prefer more of executive and scientific areas whereas girls were found to be more inclined towards literary and household areas. There exists no significant difference between the vocational preferences among different life skills groups. No significant interaction effect of ICT competencies and life skills was found on vocational preference of 11^{th} class students. ICT competencies had significant influence on life skills of both boys and girls.

Chaudhary (2012) studied the effectiveness of ICT training program on digital literacy' commenced for in-service and pre-service teachers and the effectiveness of ICT training program on teacher educator's digital literacy, with the development of ICT in education, teacher-educators must be equipped with the skills and knowledge of ICT in the classroom teaching learning activities. The study found out that most teacher-educators were not aware of the use of computer but after a training program was held, large numbers of the teacher-educators were fluent and

skilled in the use of ICT. To prepare the new generations of ICT literate teachers, the teacher-educators must set an example to the student-teachers first.

Mahat et al. (2012) conducted a study on 'A Study of Teachers Attitudes towards ICT Teaching Process' in which they examined the relationship between teacher's attitude towards ICT teaching, student engagement in the class and teaching time. Sample taken were the experienced teachers under 30 to 40 age group of computer science department of Smt.KasturbaiWalchand College, Sangli. Regression analysis of their study indicated that there was significantly high and positive correlations between teacher's attitudes toward ICT and the time consume for teaching in the class. Result of the data analysis also showed that there was a significantly high and positive correlation between students engagement in the class and the amount of time used for teaching in the class and there was no correlation between teacher's attitude towards ICT and students engagement in the class.

Sahin (2012) conducted a study titled 'Pre-Service Teachers Perspectives of the Diffusion of Information and Communications Technologies (ICTs) and the Effect of Case-Based Discussions (CBDs)' and investigated pre-service teachers' perspectives of the diffusion of information and communication technologies (ICT) in elementary education and the effect of case-based discussions (CBDs). A quasi-experimental pre-test and post-test design was executed to test the effect of pre-service teachers' perspectives on ICTs diffusion in elementary teaching. The research results revealed that the pre-service teachers' perceptions about innovativeness and relative advantage indicated that they had pre-established perspectives, mainly positive, about the diffusion of ICTs in elementary teaching; and CBDs positively affected their perceptions such that their computer-related persuasions and decisions positively increased.

Nagpal et al. (2013) conducted a study on integrating Information and Communication Technology (ICTs) in teacher education in which they analysed and organised a variety of approaches found in IT uses in teachers training into a four-cell

matrix. The findings revealed that unless teachers are fully comfortably with new approaches to integrating ICT in teaching, providing students with computers and educational content alone have limited impact on the teaching and learning process.

Graciois and Annaraya (2013) surveyed ICT awareness and teaching competency of prospective B. Ed teachers studying in colleges of Education affiliated to the Tamil Nadu Teachers Education University, Chennai at Tirunelveli, Thoothukudi and Kanyakumari districts. The investigator collected data from 242 Prospective B. Ed Teachers by using stratified random sampling technique. The results of the data analysis revealed that:

- There was no significant difference between age above 22 and age below 22 prospective B. Ed teachers in their ICT awareness.
- There was no significant difference between married and unmarried prospective B. Ed teachers in their ICT awareness.
- There was no significant difference between UG and PG prospective B.Ed teachers in their ICT awareness and teaching competency
- There was a significant difference between age above 22 and age below 22 prospective B.Ed teachers in their classroom management, teaching aids, extracurricular activities, curricular activities, communication, teaching methodology, ethics of teaching, rapport with students and teaching competency.

Ofoegbu and Asogwa (2013) investigated the Information and Communication Technology competencies of lower and middle Basic Science and Technology teachers in Enugu state. The population consisted of 13630 teachers in Enugu State and 1363 middle and lower Basic Science and Technology teachers were randomly selected as sample using stratified random sampling technique. The findings of their study revealed that the Basic Science and Technology teachers lacked competence in basic ICT operations. Furthermore, there was a significant difference in the ICT competencies of the lower and middle Basic Science and Technology teachers in terms of gender, age and qualifications. The findings of their

study revealed that female of Basic Science and Technology teachers were having higher ICT competencies as compare to male Basic Science and Technology teachers, aged 25 – 35 years of Basic Science and Technology teachers have higher ICT competence than those aged 36 – 46 years and 47 – 60 years of Basic Science and Technology teachers. The result of the study also showed that Basic Science and Technology teachers with M.Ed. have higher competence than those with B.Ed, NCE and TCII.

Samson (2013) studied teacher trainees' attitude towards Information and Communication Technology. The samples were collected from 952 teacher's trainee from urban and rural, aided and unaided institutions. The findings revealed that the B. Ed trainees have a favourable attitude towards ICT and there was no significant difference in the attitudes of ICT in relation to gender and locality. The result of the study also showed that majority of teacher trainees 60.5% showed uncertainty in their attitude and only 39.5% of the trainees showed positive attitude towards ICT.

Sharma and Abraham (2014) in their article 'ICT Competency and Student Teachers' Academic Achievement' revealed that:

- The ICT competency significantly impacted theory performance, but it had no effect on practical performance.
- Student teachers of the medium ICT group performed better in theory than student teachers of low ICT group.
- Student teachers of high ICT group performed better in theory than student teachers with low ICT group.
- Student teachers of high ICT group performed better in theory than student teachers of the medium ICT group.
- There was no significant difference between the mean scores of academic achievement in practical of low ICT and medium ICT groups.
- There was no significant difference between the mean scores of academic achievement in practical of low ICT and high ICT groups.

- There was no significant difference between the mean scores of academic achievement in practical of medium ICT and high ICT groups.
- There was a significant positive correlation between ICT competency and achievement in theory.
- The achievement in practical for the entire sample did not significantly correlate with ICT competency.
- There was a significant negative relationship exists between ICT competency and academic achievement in practical.

Lalchhanhimi (2015) studied 'ICT in Elementary Teacher Education Programmes: Case Studies of DIETs in Aizawl and Lunglei' and reported the following:

- There was reliable electricity, landline telephones and fax machines in both DIET Aizawl and DIET Lunglei, whereas generator power and inverter are available only in DIET Aizawl, and both the DIET do not have solar power.

- DIET Aizawl had a separate unit for ICT, computer lab with 30 computers and the institution has used computers for more than 8 years, while DIET Lunglei do not have any of the ICT unit.

- There are laptops, server with terminals, scanner, modem, broadband antenna, generator/ solar package, institution website in the DIETs, computers, video camera, common service centre in neighbourhood and dish TV connection are available in DIET Aizawl. Web camera, Community/campus radio station, educational CDs/DVDs, radio, video conferencing facility are not available in both DIETs.

- The ICT facilities in DIET Aizawl are operated repaired and maintain by staffs from technology cells, private firms and lecturers while the operation, repairing and maintenance are all done by lecturers and office staffs in DIET Lunglei.

- There are no computers fees taken from Both DIET Aizawl and DIET Lunglei, neither there are computer course provided. In a week the student

teachers had two IT classes and the computers are open for every student teacher during their free time, at the same time, there was no computer available for the student-teachers in DIET Lunglei.

- A large majority (86 to 96 percent) of student-teachers from both DIETs benefited the use of ICT.

- A large majority (94 to 95 percent) of student-teachers from both DIETs opined that ICT helps them learn things more easily.

Koen et al. (2015) assessed the contribution of pupil, classroom and school level characteristics to primary school pupils' ICT competences: A performance-based approach. A sample of 378 pupils in 58 schools in Flanders (the Dutch speaking part of Belgium) completed a performance-based ICT competence test in order to measure their actual proficiency in retrieving and processing digital information, and in communicating through a computer. The results of a hierarchical regression analysis with multilevel design showed that the differences in ICT competences can be mainly attributed to differences in the level of pupil's characteristics. The results indicated that especially non-ICT related pupil characteristics were associated with differences in primary school pupils' ICT competences, such as interjected regulation, controlled learning style, analytic intelligence, sex and socioeconomic status. Furthermore, the final model also indicates that parental ICT attitudes are related to primary school pupils' ICT competences. Use of ICT in education as an information tool was significantly related to pupils' ICT competences.

Vasilka et al. (2015) conducted a research on factor affecting the development of ICT competencies of teachers in primary schools in order to ensure valid and reliable assessment of the extent of ICT knowledge and skills of teachers in primary schools. Samples were drawn from 220 teachers from 10 primary schools of Macedonia. Their findings showed that 25%, one-fourth of the teachers in primary schools had below basic ICT competency, 17% of teachers in primary school had

basic knowledge and skills to operate a computer, and 58%, more than half of the teachers in primary schools had proficient level of ICT competencies.

Yadav (2015) carried out a study on attitudes of secondary school teachers towards the use of Information and Communication Technology in education on secondary school teachers in Haryana. The researcher selected 80 male and 120 female, 100 rural and 100 urban, 100 government and 100 private and different age group (95 age and above, 40 and 105, below age 40) from different secondary school teachers of Haryana was selected as sample using purposive sampling technique. The research study showed that:

- Female secondary school teachers have more favourable attitudes towards the use of ICT in education.
- The secondary schools teachers of urban areas show more positive attitudes than the rural areas on using ICT in education.
- Private secondary school teachers showed greater attitude towards use of ICT in education as compared to government school teachers.
- Secondary school teachers below 40 age group showed greater attitude towards use of ICT than teachers above 40 age group secondary school teachers

Amua-Sekyi and Asare (2016) analysed the degree of information and communication technology literacy among teachers at a public university in Ghana, as well as the impact of age and gender on lecturers' level of ICT literacy.Out of 526 lecturers, 96 were selected by the investigators to participate in the research using a survey approach that employed stratified random sampling technique. Using frequencies, means, t-tests, and analysis of variance (ANOVA), the data were analysed. In accordance with the study's findings, lecturers have a high level of ICT proficiency. There was no difference between male and female in the lecturers' ICT literacy. Lecturers' literacy levels are unaffected by their age. The investigators recommended that interventions be prepared to assist in enhancing

lecturers' utilisation of the academic resources offered by the institution to enhance the performance of their duties as expert teachers.

Dwivedi (2016) examined the efficiency of college teachers who were both familiar and unfamiliar with ICT. The findings of the study showed that college instructors who were familiar with ICT were more effective than those who were not. College art instructors who were familiar with ICT were more effective than those who were not. Science-stream college instructors who were conversant with ICT performed better than those who were not. The study also discovered that ICT knowledge and teaching experience had no discernible impact on the efficacy of college teachers in the arts and sciences.

Sarfo et al. (2016) investigated ICT access, use and competency level among second-cycle school teachers in Ghana. The investigator adopted the global citizenship survey instruments to collect the data which was analyzed using SPSS version, descriptive statistics and Chi square. The results revealed that majority of the respondents 89% used mobile phones and e-mail for social communication. It was further discovered that most of the respondents possessed high competence level in ICT applications.

Chuaungo (2017)analyzed 'Use of ICT for Education among B. Ed Students and Teachers in Mizoram' and concluded that:

- Fifty per cent of B. Ed students felt that their teachers often used PowerPoint presentations in teaching, whereas the other fifty per cent felt that their teachers rarely used PowerPoint in teaching.

- Teachers were asked to what extent they were able to focus on developing ICT skills and confidence in their students, 30 per cent of them reported that they were able to give considerable focus to developing skills and confidence in their students. 'Moderate focus' was the answer given by another 30 per cent and 'none' by 40 per cent.

- Fifty per cent of student teachers reported that they had been required to demonstrate ICT competence in their coursework while the remaining 46 per cent of students were not aware of the requirement to do so.

- The majority (73 per cent) of B. Ed students accepted that their ICT skills and competence had been enhanced by the ICT involved training they received in the institution, 27 per cent of the students were of the view that the teaching-learning process as a whole had no impact on their ICT skills and confidence. They reported that they did not acquire any new skills beyond the ones they had already acquired.

- Fifty six per cent of student respondents encountered some barriers in accessing the ICT facilities at the institutes. Barriers stated by the institute's teachers were inadequate facilities and equipment, poor internet connection, irregularity of internet access, and an inadequate number of ICT experts at the institution.

- The majority of the student respondents' (85%) felt that ICT skills should be a requirement for teacher recruitment as well as in-service teachers. However, only 2% of the respondents opined that it was unnecessary to insist upon the skill for all prospective and in-service teachers and 13% of students had no idea whether the skill should be made a requirement for the same.

Nurhabibahet. al. (2018)analyzed ICT literacy competence among vocational high school teachers and found that teacher's lack of self-confident in using ICT and gender factor influence ICT integration in which the level of ICT literacy in male is higher than female. The group of young teachers aged 21-40 have higher level of ICT literacy compared with the older group. Demographic factor in ICT literacy competence are gender, education level and age.

Tondeura (2018) carried out a study on a multilevel analysis of what matter in the training of pre service teacher's ICT competencies. The main objectives of their study was investigating the impact of pre-service teachers' background (age and gender) and ICT characteristics (example, attitudes towards ICT) in combination with the support they received from their teacher training institution on their ICT competencies. The finding revealed that gender and age did not affect pre-service teachers' ICT competence for educational practice. The findings showed that the more pre-service teachers perceived the occurrences of the strategies during their teacher education, the higher their perceived competence to use ICT for learning and enhance their instructional practice. The results revealed a positive impact of pre-service teachers' attitudes towards ICT (in education) and ease of use, on their ICT competence for educational practice.

Bera and Mohalik (2020) explored the role of Information and Communication Technology in enhancing the quality of teaching learning. The investigator highlighted that the adoption and use of ICTs in education have a positive impact on teaching, learning and research. ICT can affect the delivery of education and enable wider access and increase flexibility so that learners can access easily and increase flexibility so that learners can access the education regardless of time and geographical barriers. It can influence the way students are taught and how they learn. It would provide the rich environment and motivation for teaching learning process which seems to have a profound impact on the process of learning in education by offering new possibilities for learners and teachers. These possibilities can have an impact on student performance and achievement. Similarly wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching and improved academic achievement of students. The overall literature suggests that successful ICT integration in education.

Buladaco (2020) investigated the effect of ICT competencies towards teaching strategy of senior high school teachers. The study showed that technology based teaching and learning is more effective in comparison to the traditional classroom. This was because using ICT tools and equipment will prepare an active

learning environment that is more interesting and effective for both teachers and students. The investigator found that the senior high school teachers had high level of ICT competencies and there was no significant difference on the ICT competencies between male and female.

Murtala (2020) conducted a research study on 'Availability and Utilization of Information and Communication Technology for Teaching Science Subjects in Nigerian Armed Forces Secondary School'. Stratified random sampling technique was adopted to select 251 science teachers from 40 Nigerian Armed Forces Secondary Schools. Findings from the study showed that most available ICT tools were desktop computers, laptop, mobile phones, projectors, microphones, computer laboratory, internet café, printer and photocopiers. The result of the study indicated that frequent power supply disruption and poor internet services are the inhibiting factors to ICT utilization. The result of the investigation indicated that 15 out of 18 ICT tools available were inadequate in quantity. The investigator suggested that the technological tools in Nigerian Armed Forces Secondary Schools must be readily available in good condition to utilize in such a way that the science teachers and students could utilize them to enhance their teaching and learning.

Devi (2021) assessed the importance of ICT: teaching and learning enrichment and reported that ICT's role in education has become increasingly significant, and will continue to do so throughout the twenty-first century. It has added a facet to learning that was not available beforehand. The traditional modes of teaching and learning have been replaced by online and virtual environments as a result of the integration of ICT into the educational sector. The investigator also highlighted that ICT can provide universal access to education, enhance teacher professional development, deliver high-quality teaching and learning, promote equality of opportunity in education, and facilitate more effective educational management, governance, and administration. The teaching-learning process has changed significantly in the twenty-first century because of the increasing usage of information and communication technologies (ICTs). The use of ICT in education not only enhances the classroom teaching and learning process, but also enables the capability of e-learning.

Gaonkar (2022) examined high school teacher's attitude towards ICT use in education. The sample consists of high school teachers from Karwar taluka of Karnataka state during the academic year 2021-2022. The investigator reported that high school teachers have high level of positive attitude towards use of ICT in education and high school teachers believed that ICT in education enhance the teaching learning process.The investigator also highlighted that there was no significant difference between male and female student teachers of high school teachers in their attitude towards ICT use in education.

Lin et al. (2022) conducted a study on 'Does teacher's data literacy and digital teaching competence influence empowering students in the classroom? Evidence from China'. Their study aims to reveal the relationship between teacher's information and communication technology (ICT) attitude, ICT skills, data literacy, digital teaching competence and empowering students. The investigators collected data from an online self-assessment scale which included a total of 629 K-9 teachers in Binjiang District, Hangzhou, Zhejiang, China. The results showed that:

- No significant differences were found between gender and educational background on ICT attitude, ICT skills, data literacy, digital teaching competence and empowering students
- Data analysis showed that digital teaching competence had a significant direct impact on empowering students
- ICT skills had significant positive effects on data literacy.
- ICT skills had a significant direct impact on empowering students.
- There was no significant direct impact of ICT attitude on digital teaching competence.

2.4. Relevance of the Present Study in the Background of Studies Reviewed

A review of literature related to the study of life skills and ICT was done by the scholar in order to know more about the status of researches done and to have an in depth study on the findings of other researchers on the topic. For a period of 42 years spanning from 1980 to 2022, a total of 127 research works could be traced.

There were 46 studies related life skills, 40 studies related to social intelligence and 41studies were related to ICT competencies.

Most of the studies were focuses on various impacts and relationship of life skills in students and teachers in the fields of emotional intelligence and social intelligence. Meanwhile some studies also focused on competency of ICT and student teachers academic achievement. This would go a long way in filling the research gap in these fields.

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CHAPTER III

METHODOLOGY AND PROCEDURE

3.0. Introduction

Research is a systematic investigation into a phenomenon to establish relationship between variables in order to arrive at a valid conclusion. It may also be defined as ‘the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles or theories, resulting in prediction and possibly ultimate control of events’ (Best and Kahn, 2004). Methodology is the science of methods. Divergent methods which are used by the researchers during the course of studying the research problem can be termed as research methodology. This chapter's primary goal is to explain the methodological elements, including study design, population and sample, data gathering instruments, tool administration, and data collection. The study's methodology is covered in this chapter.

Any research's objectivity, dependability, validity, and generalizability are greatly influenced by the suitability of its methods. Therefore, this chapter, under its various sections, discusses the what, why, and how issues pertaining to the study's methodology, population, tools for gathering data, and statistical technique employed by the researcher. The following parts make up the chapter's structure:

3.1 Research design

3.2 Population and Sample

3.3 Tools for data collection

3.4 Administration of the tools and data collection

3.5 Statistical technique for data analysis

3.1. Research Design

Research design is a plan outlining the steps the researcher will take, starting with writing goals, hypotheses, and their operational consequences, and ending with findings from data analysis. Given that it outlines the complete research process, a research plan aids the researcher in discovering solutions to the research problem and other issues raised by the study. Additionally, a research design instructs us how to gather data, what observations should be made, how to make them, and how to evaluate the data.

The design informs the investigator's choice of statistical methods for analysis. In experimental study, design also provides guidance for controlling specific factors. The decision about the method depends upon the nature of the problem selected for the study and the kind of data, necessary for the fulfilment of the objectives of the study. The present study is descriptive in nature. A descriptive study describes and interprets the present status of what is being studied, recording, describing, analyzing and interpreting the conditions that already exist. Descriptive study describes and interprets 'what is'. 'It is concerned with condition or relationships that exist, opinions that are held, processes that are going on, the effects that are evident, or trends that are developing' (Best & Khan, 2004). As the present research was to describe and interpret the effect of life skills on social intelligence and ICT competency of student teachers of Mizoram. Here the purpose is concerned about 'what is' the effects of independent variable upon dependent variable to see if they support emerging generalisations is another focus of the research.

3.2. Population and Sample

'A population is defined as a group of individuals with at least one common characteristic which distinguishes that group of individuals' (Best & Kahn, 2010). For the present study all student teachers pursuing B. Ed course during the academic years 2020- 2022 in Mizoram constituted the population of the study since the present study is concerned with the study of the effect of life skills on social intelligence and ICT competency of student teachers of Mizoram. The sample consists of 451 student teachers in Mizoram using probability proportional to size sampling procedure. Probability proportion to size sampling is a sampling procedure under which the probability of a unit being selected is proportional to the size of the ultimate unit,

giving larger clusters a greater probability of selection and smaller clusters a lower probability, in order to ensure that all units (example. people/organisation) in the population have the same probability of selection irrespective of the size of their cluster. Probability proportion to size sampling procedure is useful when the sampling units vary considerably in size because it assures that those in larger sites have the same probability of getting into the sample as those in smaller sites, and vice versa.

Most of the educational phenomena consist of a large number of units. It is not possible to contact each and every element of the population. The investigator has to select some individuals who would represent the whole population. The representative proportion of the whole population is called as a sample. 'A sample is a small proportion of the population that is selected for observation and analysis. By observing the characteristics of the sample, one can make certain inference about the characteristics of the population from which it was drawn.' (Best & Kahn, 2010). Samples were taken from District Institute of Education and Training Aizawl, Institute of Advanced Studies in Education, Department of Education, Mizoram University and District Institute of Education and Training Lunglei. The details of the actual number of student teachers are shown in Table 3.1 and Table 3.2.

Table 3.1

Population of Student Teachers of Mizoram

Institutions	**Population**		**Total**
	Male	**Female**	
IASE	62	186	248
MZU	118	62	200
DIET Aizawl	59	41	100
DIET Lunglei	67	33	100
Total	648*		

**student-teachers of both 2nd and 4th semester*

Table3.2
Sample of Student Teachers of Mizoram: Gender wise

Institutions	Gender		Total
	Female	Male	
IASE	86	44	130
MZU	92	72	164
DIET Aizawl	50	39	89
DIET Lunglei	48	20	68
Total	276	175	451*

**student-teachers of both 2nd and 4th semester*

3.3. Tools for Data Collection

A research tool is an instrument that is used for data gathering and has been shown to be reliable and accurate. The regularity of the tool or procedural performance is its level of dependability. The ability of data collection method or instrument to gauge what is intended to quantify is known as validity. Keeping in view the objectives of the present study the following were the tools used by the researcher:

1. Life Skills Scale (2013-2014) standardized by Raina Tiwari, published by Ascending Psychology Center, 1173, Sneh Nagar, Gada Road, Jabalpur (MP) 482002.
2. Social Intelligence Scale (2013) standardized by N. K. Chadha and Usha Ganesan, published by National Psychological Corporation, Agra 1971.
3. Scale for assessment of the competencies of student teachers on ICT was developed by the researcher.

3.3.1 Life Skills Scale

Life skills scale (2013-2014) by Raina Tiwari was prepared on Likert method, 75 statements based on different life skills was constructed. The WHO classified life skills into three major categories representing ten skills (WHO, 1999): Communication and interpersonal skills (effective communication, interpersonal relationship, empathy), Decision making and critical thinking skills (decision making, critical thinking, problem solving, creative thinking), coping and self management skills (coping with stress, coping with emotions, self awareness). The component of life skills under which the statements were classified are personal skills, social skills and communication skills. These statements were given to the panel of judges and necessary modification was made as per the suggestions given by the judges. The statements correlations of 0.6 to 0.9 were retained. In the final scale 40 statements were taken. The scale is of the self-rating type and can be administer in a group, where the student teachers had to answer 'Yes' or 'No'. Response of 'Yes' carries the numerical weight of 1 while 0 for 'No'.

As per the standardized Life Skills Scale by Raina Tiwari, the scores of an individual measured using this scale will be interpreted by using the following Table (Table 3.3). Hence, for interpreting for the response, the scores of each individual respondent were calculated and an interpretation was made as per the percentile norms given in the Life Skills Scale.

Table 3.3

Interpretation Score of Life Skills

Percentile	Levels of Life skills	Raw scores
P75 and P100	High	28-40
P50 – P70	Average	20-27
P40 and below	Low	19 and below

Student teachers who fall below 19 were under the category of low level of life skills and those who scored between 20-27 were interpreted as average level of

life skills and the student teachers who scored 28 and above were categorized into high level of life skills.

Reliability

Test – retest method was applied to obtain the reliability coefficient of the scale. Taking different sets of sample the administration of the scale was repeated after 15 days. The sample and results are given in Table 3.4, Table 3.5 and Table 3.6.

Table 3.4
Sample

Group	Age Range	No.
Boys	15-25	250
Girls	15-25	250
Male Teacher	25-55	150
Female Teacher	25-55	150
General People (Male)	25-55	150
General People (Female)	25-55	100

Table 3.5

Reliability: (N=200)

Method	Coefficient of Correlation	Level of Confidence
Test-retest (gap of 15 days)	0.79	0.01
KR Formula	0.82	0.01

Validity

Table 3.6

Validity: (N=200)

Method	Coefficient of Correlation	Level of Confidence
Construct	0.71	0.01
Content	0.69	0.01

3.3.2 Social Intelligence Scale

The Social Intelligence Scale (2013) standardized by N. K. Chadha and Usha Ganesan has 8 dimensions, namely:

1. Patience – Calm endurance under stressful situations
2. Co-cooperativeness – Ability to interact with others in a pleasant way to be able to view matters from all angles
3. Confidence – Firm trust in oneself and one chances
4. Sensitivity – To be acutely aware of and responsive to human behaviour
5. Recognition of social environment – Ability to perceive the nature and atmosphere of the existing situation
6. Tactfulness – Delicate perception of the right thing to say or do
7. Sense of humour – Capacity to feel and cause amusement; to be able to see the lighter side of life
8. Memory – Ability to remember all relevant issues; names and faces of people

The six dimensions patience, cooperativeness, confidence, sensitivity, sense of humour and recognition of social environment were constructed using the multiple choice technique. In the Tactfulness dimension, responses were elicited in terms of 'Yes' or 'No'. In the last dimension, that of memory a set of pictures was presented for recognition.

As per the standardized Social Intelligence Scale standardized by N. K. Chadha and Usha Ganesan, the scores of each individual will be interpreted by using the following Table (Table No. 3.7). Hence, for interpreting for the response, the score of each individual respondent were calculated and interpretation was made as per the z-score norms given in the social intelligence scale.

Table 3.7

z- Score Norms for Interpretation of the level of Social Intelligence

Range of Z score	Level of social Intelligence
+2.01 and above	Extremely high
+1.26 to2.00	High
+0.51 to + 1.25	Above Average
-0.50 to +0.50	Average
-1.25 to -0.51	Below Average
-2.00 to -1.26	Low
-2.01 and below	Extremely Low

As per the standardized Social Intelligence Scale standardized by N. K. Chadha and Usha Ganesan, the scores of each individual will be interpreted by using the following Table (Table 3.3). Hence, for interpreting for the response, the score of each individual respondent were calculated and interpretation was made as per the percentile norms given in the life skills scale.

Reliability

In order to determine the test retest reliability the scale was administer on a sample of (75male & 75female) and again it was administered to the same sample population.

Table 3.8

Test Re-test Reliability Co-efficient

Sr. No.	Areas	Coefficient of Co-relations
A	Patience	.94
B	Co-cooperativeness	.91
C	Confidence	.90
D	Sensitivity	.93
E	Recognition of social environment	.95
F	Tactfulness	.84
G	Sense of Humour	.92
H	Memory	.97

**All the results are significant at .01 level of significance.*

Validity

The techniques of validity used to validate this scale were:

i). Empirical Validity: To test the empirical validity, a sample of 50 individuals was taken. The external criterion used was Social Intelligence Test by F.A. Moss, T. Hunt, K. M. Omwaka and L. G Woodward (1946), George Washington University series. The present scale and the Social Intelligence Test by Moss and Hunt were administered and scored accordingly. The data obtained were subject to Pearson product moment correlation for testing the validity. The total score of the present scale was highly and significantly correlated with the Social Intelligence Test of Moss and Hunt. (r=.70 <.01). Henceforth the present scale has a validity coefficient of .70.

ii). Cross Validity: For the purpose of cross validation, a sample of 50 individuals was taken. The data obtained on the first sample and second sample was correlated to test the validity of the scale the Pearson's Product moment correlation was obtained. The co-efficient obtained are shown in Table 3.9

Table 3.9

Cross Validation- Correlation between Two Groups

Sr. No.	Dimensions	Correlation between two groups
A	Patience	.82
B	Co-cooperativeness	.91
C	Confidence	.86
D	Sensitivity	.75
E	Recognition of social environment	.91
F	Tactfulness	.75
G	Sense of Humour	.95
H	Memory	.94

3.3.3. Information and Communication Technology Scale

To study the ICT competency of student teachers, the investigator researched several readymade scale on ICT, but could not hardly find any scales that would best suit the required scale to assess the ICT competences of student-teachers, so, the investigator developed a new scale because it is a known fact that whenever population changes, it is often better to have an updated scale suited for the population from where samples are to be drawn.

Selection of Items

In order to construct statements needed for measuring ICT competences of student-teachers, the investigator consulted experts and a supervisor, books, journals and relevant literature which are related to ICT. From the study of these books, consultation of experts and from literature reviews, 40 statements were prepared for the first draft of the ICT scale. These statements were prepared keeping in view all categories related to ICT in different skills level such as:

i). Basic knowledge of ICT skills

ii). Intermediate and

iii). Advanced skills.

The scoring pattern for ICT scale suggested by Likert was followed for the present scale. The student teachers were required to give a response to every statement according to his or her skills/competences, on the four points scale provided for each item such as, With Ease, With Some Difficulty, With lot of Difficulty and Unable having a numerical weight from 3 to 0. The highest possible score for the test is (24×3) 72, and the lowest score is (24×0) 0.

The statements selected were given out to experts consisting of professionals in the field of ICT as well as faculties from Mizoram University and other University in Delhi for editing as well as for validating the statements. After this 29 statements were isolated for the preliminary draft after deletion, addition and modification of items based on the feedback of experts and supervisor.

Try out

The 29 statements ICT scale was then prepared for pilot test. Pilot test was administered to 100 (2^{nd} and 4^{th} semester) of B. Ed students from Mizoram University. The instructions given at the beginning of the test was self explanatory and no further instruction was needed to be given. The student teachers were requested to give their response as truthfully as possible. After administering the test to 100 B. Ed students, the scale was again collected and item analysis was done by finding out the discrimination value of each item.

Item discrimination

After administering the test to 100 B. Ed students of Mizoram University, scoring was done using Likert method. The entire scores was then arranging in ascending order, and the upper 27 and lower 27 were set aside for item analysis.

The mean and standard deviation of ICT scores for each statement were then computed separately for the above mentioned top and bottom groups. The t-value for significance of differences between the mean ICT scores of the top and bottom 27 group of student teachers were calculated for each of the 29 statements. After completing all these, those items having t-value above 2.63 i.e. statements which are significant at 0.01and t-value above 1.98 i.e. statements which are significant at 0.05 level of confidence were retained for the final scale and statements having t-value less than 1.98 were rejected. Consequent to item analysis, 24 statements were yet again discarded and the final scale that was used to employ for data collection comprised of 24 statements and the discrimination value in the form of t-value is given in Table 3.10.

Table 3.10

Mean Standard Deviation and t-value of High and Low groups on different Items of ICT Scale

Item No.	High Group		Low Group		t-value	Significance
	Mean	SD	Mean	SD		
1	3	0	2.89	0.31	0.81	NS
2	3	0	2.67	0.46	3.93	**
3	3	0	2.48	0.76	3.71	**
4	2.70	0.47	0.05	2.08	3.79	**
5	2.74	0.21	2.33	0.93	2.05	*
6	2.74	0.46	2.07	0.89	3.35	**
7	2.70	0.46	2	1.03	3.18	**
8	3	0	2.81	0.65	19	**

9	2.78	0.63	2.56	0.82	1.29	NS
10	0.5	3.89	2.44	4.17	6.68	**
11	2.77	0.48	1.59	1.05	3.8	**
12	2.81	0.43	1.81	1.41	20	**
13	2.62	0.53	1.44	1.19	2.51	*
14	2.63	0.49	1.96	1.19	2.79	**
15	2.96	0.22	2.92	0.33	2	*
16	3	0	2.89	0.6	6	**
17	3	0	2.44	2.71	0.05	NS
18	2.81	0.43	1.92	0.37	44.5	**
19	2.85	0.37	2.25	0.71	30	**
20	2.81	0.43	1.44	0.98	6.85	**
21	2.77	0.46	1.59	1.05	23.6	**
22	2.51	0.51	1.89	0.93	3.1	**
23	2.92	0.33	2.03	1.17	4.45	**
24	2.85	0.37	1.74	0.84	6.52	**
25	3.74	2.64	1.51	1.2	3.98	**
26	3	0	2.96	2.13	0.09	NS
27	2.89	0.3	1.70	1.03	-29.75	**
28	3	0.43	2.29	0.54	-7.1	**
29	3	0	2.67	2.79	0.62	NS

**NS= Not significant, *Significant at 0.5 level, **Significant at 0.1 level*

Reliability

The reliability was calculated using Cronbach's Alpha and Spearman Brown Prophecy coefficient. The internal consistency measure Cronbach's Alpha obtained was found to be 0.881 and thus it was interpreted that the test was highly reliable. Similarly Spearman Brown Prophecy coefficient and the Gultman split half coefficient value were 0.9 and 0.887 respectively. The scale was thus found to be reliable.

Validity

Validity is that of quality of a data gathering instrument or procedure that enables it to measure what it is supposed to measure and performs as it is designed to perform. For the present scale, content validity was established by seeking the opinions of experts in the field of education and ICT with the nature of content covered by the statements on ICT competences. The following were the list of experts consulted for content validity of the ICT competences scale. 1) Prof. Lalhmasaii Chuaungo, Department of Education, Mizoram University. 2) Prof Lalbiakdiki Hnamte, Department of Education, Mizoram University. 3) Prof Lynda Zohmingliani, Department of Education, Mizoram University. 4) Prof H. Malsawmi, Department of Education, Mizoram University. 5) Prof. Lokenath Mishra, Department of Education, Mizoram University. 6) Prof. Jessy Abraham, Department of Teacher Training and Non –formal Education, Jamia Millia Islamia 7) Dr. Sameer Babu, Assistant professor, Jamia MiliaIslamia.

3.4. Administration of the Tools and Data Collection

All of the tools applied in this investigation were self-administering scales. The original sources from which the data were gathered, except at DIET Lunglei, where data were gathered via a Googleform facade owing to the covid-19 pandemic, the investigator personally visited the institutes chosen for the research. After getting approval from the institution's administrators, the scales were given to the student instructors. During the hour of class, the institution's professors assisted in administering the scales. The goal of the study and the fact that the information

gathered would be kept private and utilised solely for research were both highlighted throughout the administration of the scale. There was a considerable priority placed on the fact that there is no right or incorrect response to any of the scale's claims, and the respondents were asked to provide honest and accurate responses to all of the items (without missing any item or statement). The Life Skills Scale, Social Intelligence Scale, and ICT Competency Scale were distributed once the student instructors received the relevant guidelines and instructions about the scales. The entire process took an hour and a half.

The data collected from the student teachers were scrutinized and tabulated after scoring the responses on all of the tests using the test scoring procedures given in the respective manuals. Each respondent was assigned a serial number and their details regarding gender and the scores of the three tests were entered in the tabulation sheet and these were subjected to statistical treatment. For this, the following statistical tests were employed.

3.5. Statistical Techniques for Data Analysis

Keeping in view the nature of the data and objectives of the study, the investigator employed the following techniques for analyzing the data.

Descriptive statistics were used such as:

1. Measures of central tendency of mean. Measures of central tendency are the most basic and, often, the most informative description of a population's characteristics. They describe the average member of the population of interest.
2. Measures of dispersion of standard deviation which provides information about the spread of a variable's values.
3. Test of significance for mean differences. The t-test was used to find out the significant difference between male and female student teachers
3. Correlation to find out how the independent variable is related to the dependent variable. Measures of association indicate whether two variables are related. Pearson product moment correlation was used to find out the strength of the relationship between the independent variable (life skills) and dependent variables (social intelligence and ICT competencies).

Inferential statistics such as linear regression analysis was used to examine the influence or effect of one or more independent variable on dependent variable. To predict the effect of independent variable (life skills) on dependent variables (social intelligence and ICT competencies) linear regression analysis was adopted.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

The present chapter gives a detailed account of analysis and interpretation of data relating to the various objectives of the study. Data analysis is the process of categorizing, ordering and summarizing data to obtain clarification to research hypotheses. Analysis means to study the data in order to determine inherent facts or meaning. Analysis can determine how much of a variable is associated with another variable in a phenomenon under certain circumstances. Analysis and interpretation of data is a systematic approach in accordance with the objectives and research hypotheses. Based on the objectives of the study as stated in chapter 1, the objectives of the present study includes: To find out the level of life skills of student teachers in Mizoram; To find out the level of social intelligence of student teachers pursuing B. Ed. course in Mizoram; To find out the ICT competency levels of student teachers in Mizoram; To compare the life skills of student teachers in Mizoram with reference to their gender; To compare the level of social intelligence of student teachers in Mizoram with reference to their gender; To compare the ICT competency levels of student teachers in Mizoram with reference to their gender; To find out the effect of life skills on social intelligence of student teachers in Mizoram; To find out the effect of life skills on ICT competencies of student teachers in Mizoram.

For the present study the collected data has been analyzed using different tools. The data relating to the level of life skills were collected by administering Life Skills scale developed by Raina Tiwari, Social Intelligence scale developed by N. K. Chadha and Usha Ganesan and ICT scale developed by the investigator. All the three scales which were administered were tabulated after scoring was done and the data was made ready for analysis and interpretation. The analysis of the data was carried out with the help of appropriate statistical techniques. The following statistical techniques were used:

- Mean and Standard deviation – to find out the level of life skills, social intelligence and ICT competency of student teachers in Mizoram

- t-test – to find out the significant of difference between male and female student teachers of Mizoram
- Correlation – to find out the strength of the relationship between the independent variable (life skills) and dependent variables (social intelligence and ICT competencies) of student teachers in Mizoram
- Linear regression – to study the effect of independent variable (life skills) on dependent variables (social intelligence and ICT competencies)

The findings of the study are presented and interpreted in the present chapter in accordance with the objectives stated in chapter 1 as follows:

4.1. Objective No. 1: Level of life skills of student teachers of Mizoram

To find out the level of life skills of student teachers of Mizoram, the investigator made use of the Life Skills Scale developed by Raina Tiwari. As per the standardized Life Skills scale, the scores of each individual student teacher were calculated and interpretation was made as per the percentile norms given in the Life Skills scale. The research findings of the overall mean, standard deviation and detailed classification into different categories of the student teachers are shown in Table 4.1 and Table 4.2.

Table 4.1

Overall mean of life skills of student teachers of Mizoram

Variable	N	Mean	Std. Deviation
Life Skills	451	26.95	5.54

It is perceptible from Table 4.1 that the mean score and standard deviation of the level of life skills of 451 student teachers in Mizoram were found to be 26.95 and

5.54 respectively. Therefore, it may be inferred that student teachers of Mizoram had average level of life skills.

Table 4.2

Overall levels of life skills of student teachers of Mizoram

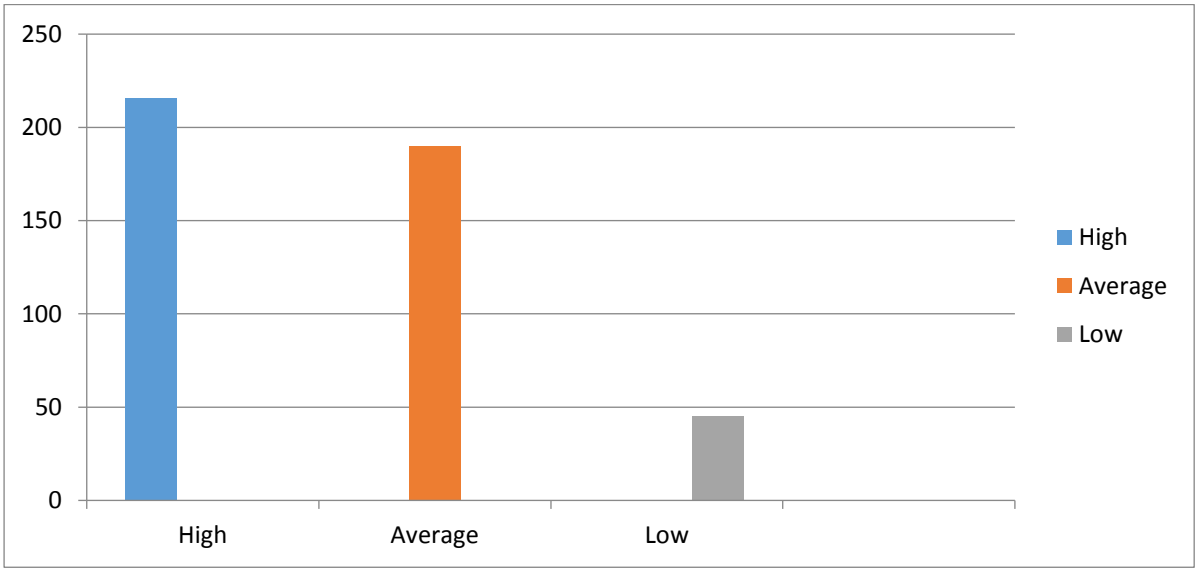
(N=451)

Raw Scores	***f***	**Interpretation**	**Percentage (%)**
28-40	216	High	47.89
20-27	190	Average	42.13
19 and below	45	Low	9.98

Table 4.2 and Figure 1 show the overall picture of the level of life skills of student teachers of Mizoram. Out of 451 student teachers, 216 (47.89%) student teachers had high level of life skills, 190 (42.13%) student teachers had average level of life skills and 45(9.98%) student teachers had low level of life skills.

Figure 1

Overall levels of life skills of student teachers of Mizoram



4.2. Objectives No. 2: Level of social intelligence of student teachers of Mizoram

To find out the level of social intelligence of student teachers of Mizoram the investigator made use of Social Intelligence Scale developed by N. K. Chadha and Ms. Usha Ganesan. The scores of each individual student teacher were calculated and interpretation was made as per the z-score norms given in the social intelligence scale. The research findings of the overall mean, standard deviation detailed classification into different categories of the student teachers are reflected in Table 4.3 and Table 4.4.

Table 4.3

Overall mean of social intelligence of student teachers of Mizoram

Parameter	N	Mean	Std. Deviation
Social Intelligence	451	102.79	9.05

Table 4.3 reflected the overall picture of the level of social intelligence of the student teachers. The mean score and standard deviation of the level of social intelligence of 451 student teachers of Mizoram were found to be 102.79 and 9.04 respectively. Therefore, it may be inferred that student teachers of Mizoram were having above average level of social intelligence

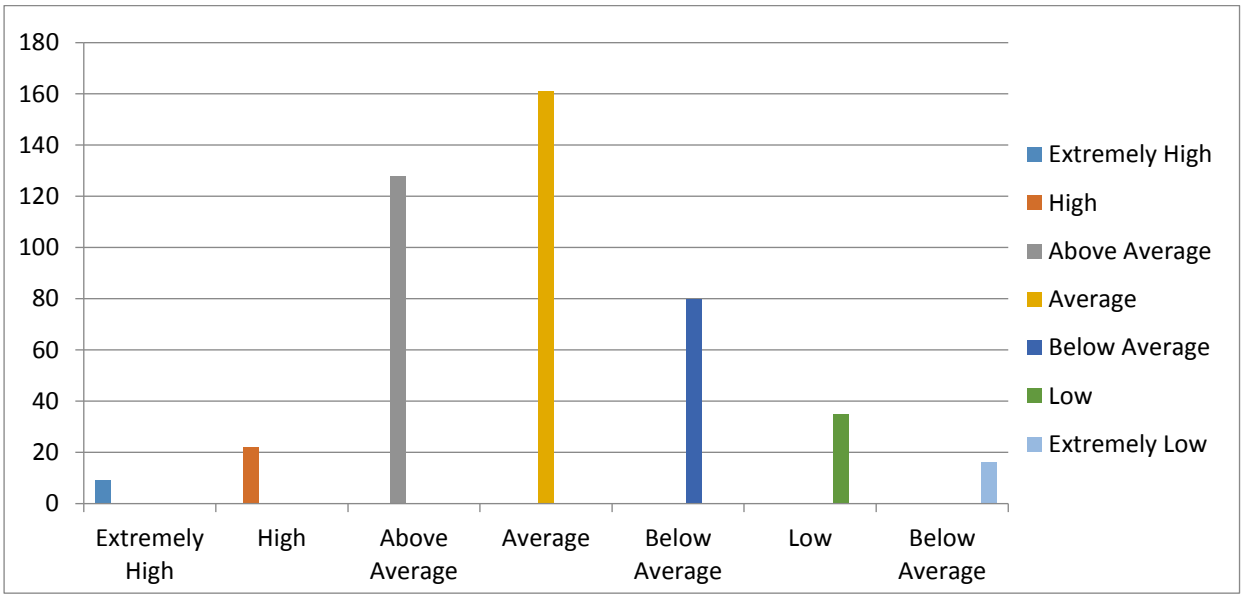
Table 4.4
Overall levels of social intelligence of student teachers of Mizoram

Range of z-Score	**Range of actual score**	**Level of social Intelligence**	***f***
+2.01 and above	120 and above	Extremely High	9 (1.99%)
+1.26 to 2.00	109 – 119	High	22 (4.88%)
+0.51 to + 1.25	98 – 108	Above Average	128 (28.38%)
-0.50 to +0.50	82 - 97	Average	161 (35.69%)
-1.25 to -0.51	71 - 81	Below Average	80 (17.74%)
-2.00 to -1.26	60 – 70	Low	35 (7.76%)
-2.01 and below	59 and below	Extremely Low	16 (3.55%)

As shown in Table 4.4 and Figure 2, out of 451 student teachers 9(1.99%) student teachers were having extremely high level of social intelligence, 22(4.88%) student teachers were having high level of social intelligence, 128 (28.38%) student teachers were having above average level of social intelligence, 161 (35.69%) student teachers were having average level of social intelligence, 80 (17.74%) were having low level of social intelligence and 16 (3.55%) student teachers falling on the extremely low level of social intelligence.

Figure 2

Overall level of social intelligence of student teachers of Mizoram



4.3. Objective No. 3: Level of ICT competencies of student teachers of Mizoram

For the purpose of ascertaining the level of ICT competencies of student teachers of Mizoram, ICT scale developed by the investigator was administered to 451 student teachers in Mizoram. After scoring, their scores were tabulated. In order to establish the norms, the raw scores of all the 451 student teachers were transformed into stanine scale by organizing them in frequency distribution and then giving the percentage of each stanine score points according to the normal distribution curve. The first stanine includes 4 percent, second stanine includes next 7 percent, third stanine includes next 12 percent and fourth stanine includes next 17 percent, the

middle or fifth stanine includes middle 20 percent, sixth stanine covers next 17 percent, seventh stanine covers next 12 percent, eighth stanine includes next 7 percent and the top or ninth stanine includes next 4 percent of the total cases. This way, norms for interpreting the raw scores are prepared with the help of stanine grade. Accordingly, stanines 1, 2 and 3 indicate low level of ICT competencies, stanines 4, 5 and 6 indicate average level of ICT competencies, and stanines 7, 8 and 9 indicate high level of ICT competencies. The research findings of the overall mean, standard deviation, detailed classification into different categories of the student teachers are reflected in Table 4.5 and Table 4.6 and Table 4.7.

Table 4.5

Stanine grade and interpretation of the levels of ICT competencies

Stanine	Percentile rank	Grade	Interpretation
9	Above 95	9	High level of ICT competency
8	89-95	8	
7	77-88	7	
6	60-76	6	Average level of ICT competency
5	40-59	5	
4	23-39	4	
3	11-22	3	Low level of ICT competency
2	4-10	2	
1	Below 4	1	

Table 4.6

Overall mean of ICT competencies of student teachers of Mizoram

Parameter	N	Mean	Std. Deviation
ICT Competency	451	58.45	11.44

It is perceptible from Table 4.6 that the mean score and standard deviation of the level of ICT competencies of student teachers of Mizoram were found to be 58.45 and 11.44 respectively. Therefore, it may be inferred that student teachers of Mizoram have average level of ICT competencies.

Table 4.7

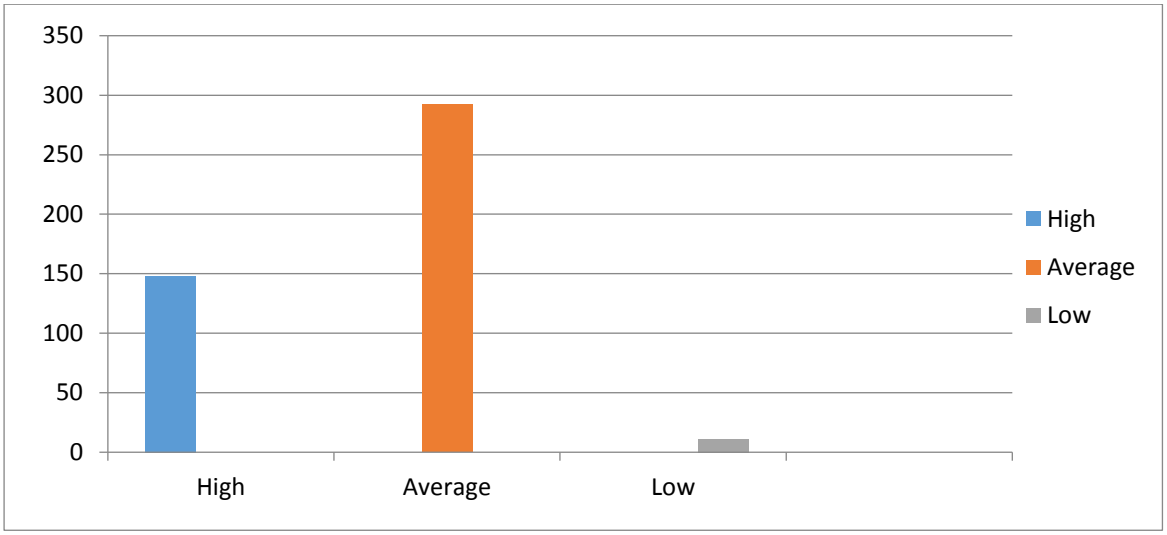
Overall level of ICT competencies of student teachers of Mizoram

Percentile rank	Interpretation	*f*	Percentage (%)
77 and above	High	148	32.81%
23-76	Average	292	64.74%
22 and below	Low	11	2.44%

Table 4.7 and Figure 3 show the overall picture of the level of ICT competencies of all the student teachers. It is clearly seen from the table that almost all of the student teachers were found to be having high and average level of ICT competencies. Out of 451 student teachers, majority of the student teachers 292 (64.74%) had average level of ICT competencies, 148 (32.81%) had high level of ICT competencies and only 11 (2.44%) fall on low level of ICT competencies.

Figure 3

Overall Level of ICT competencies of student teachers of Mizoram



4.4. Objective No. 4: Levels of life skills of student teachers of Mizoram with reference to their gender

To find out the level of life skills between male and female student teachers of student teachers of Mizoram, descriptive statistics such as mean, standard deviation and t-test were employed and the detailed study of the results are reflected in Table 4.8, Table 4.9 and Table 4.10.

Table 4.8

Overall mean of life skills of student teachers of Mizoram – Gender wise

Gender	N	Mean	Std. Deviation	SEM
Male	175	27.29	5.59	0.42
Female	276	26.73	5.49	0.33

It is clearly seen from Table 4.8 and Figure 4 that the mean scores and standard deviation of the level of life skills of male student teachers were found to be 27.29 and 5.59 respectively. Similarly, the mean score and standard deviation of the

level of life skills of female student teachers were found to be 26.73 and 5.49 respectively. Therefore, it may be inferred that male student teachers and female student teachers had average level of life skills. Only a slight difference was found on the mean scores of male and female student teachers and the obtained difference may be attributed to chance factor.

Figure 4

Overall mean of life skills of student teachers of Mizoram – gender wise

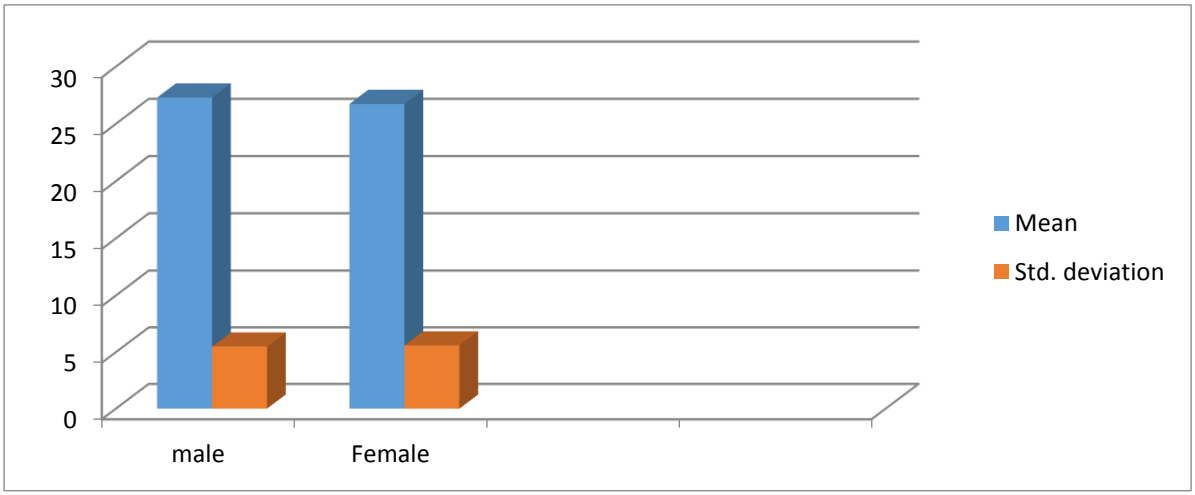


Table 4.9

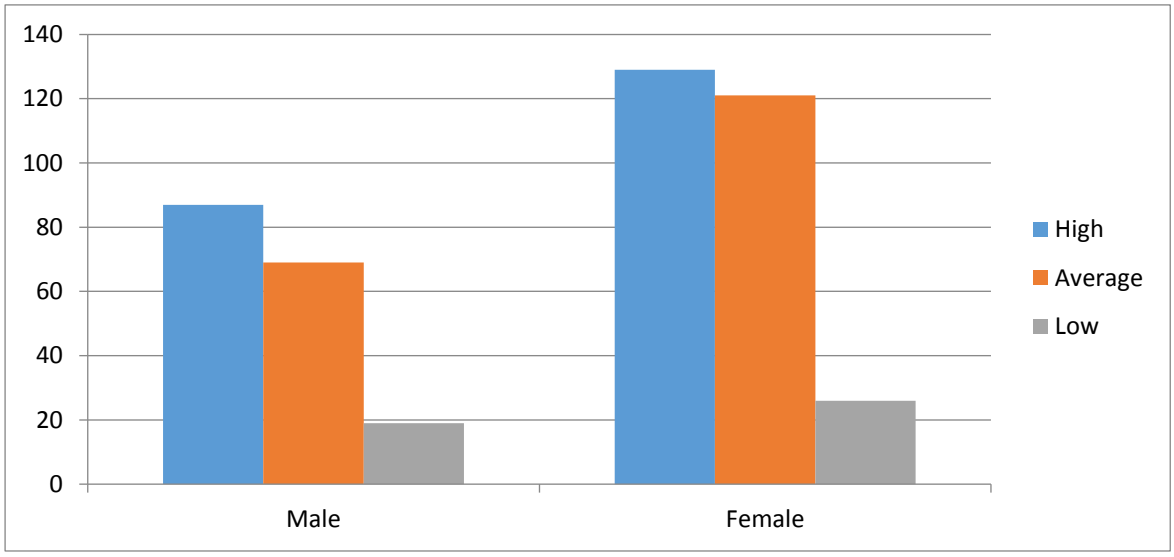
Overall levels of life skills of student teachers of Mizoram – gender wise

Gender	N	High	Average	Low
Male	175	87 (49.71%)	69 (39.43%)	19 (10.86%)
Female	276	129 (47.44%)	121 (43.84%)	26 (9.42%)

The detailed information on male and female student teachers falling in different categories of life skills can be interpreted from Table 4.9 and Figure 5. Out of 145 male student teachers, 87 (49.71%) male student teachers were having high level of life skills, 69 (39.43%) male student teachers were having average level of life skills and 19 (10.86%) male student teachers were having low level of life skills. Out of 276 female student teachers, 129 (47.44%) female student teachers were having high level of life skills, 121 (43.84%) female student teachers were having average level of life skills and 26 (9.42%) female student teachers were having low level of life skills.

Figure 5

Overall life skills of student teachers of Mizoram – gender wise



4.4.1. Difference in the levels of life skills between male and female student teachers in Mizoram

To find out the significant differences between male and female student teachers on their level of life skills, a hypothesis was framed and inferential statistics such as t-test was employed.

Hypothesis 1 states that, 'There is no significant difference among the life skills of student teachers in Mizoram with reference to their gender.'

Table 4.10

Comparison of the levels of life skills between male and female student teachers of Mizoram

(N= 451)

Variable	Gender	N	Mean	SD	SEM	t-value	p-Value	Significant level
Life Skills	Male	175	27.14	5.59	.42	.87	.38	NS
	Female	276	26.67	5.58	.33			

As shown in Table 4.10, the t-value for the significance of difference in the levels of life skills between male and female student teachers of Mizoram was found to be 0.87. Therefore, the hypothesis which was framed 'There is no significant difference in the levels of life skills between male and female student teachers of Mizoram' was accepted. Considering their mean scores, a slight difference was found favouring male student teachers but not statistically significant.

The findings of the hypothesis 1 in relation to gender differences can be incorporated with the findings of some studies indicates no significant differences between male and female student teachers in their level of life skills (Das 2019, Vijayalakshmi 2019, Vijayarani & Geetha 2017, Garg 2011**,** Sandhu 2014).

In contrast to the findings of hypothesis 1, some studies found that male were having higher level of life skills as compared to female (Ajitha 2007, King 1999, Dayaprasad 2019). Contrasting to the findings of Ajitha (2007), King (1999), Dayaprasad (2019) female were having higher level of life skills (Sridevi & Amuthavalli 2019, Sridevi 2019).

4.5. Objective No. 5: Level of social intelligence of student teachers of Mizoram with reference to their gender.

To find out the level of social intelligence between male and female student teachers of Mizoram, descriptive statistics such as mean, standard deviation and t-test were used and the detailed study of the results are reflected in Table 4.11, Table 4.12 and Table 4.13.

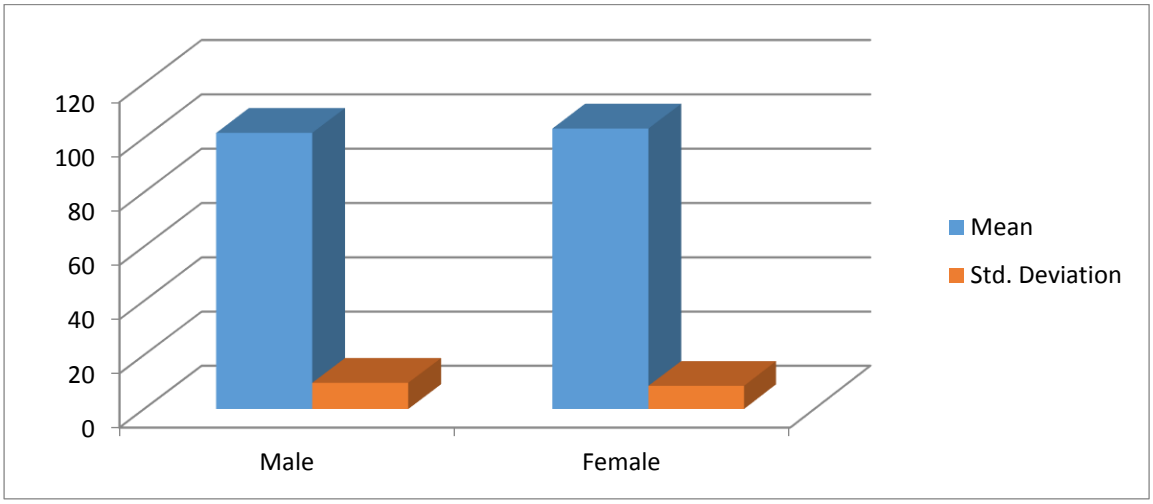
Table 4.11
Overall mean of social intelligence of student teachers of Mizoram – gender wise

Gender	N	Mean	Std. Deviation	SEM
Male	175	101.81	9.69	0.73
Female	276	103.41	8.57	0.51

It is clearly seen from Table 4.11 and Figure 6 that the mean score and standard deviation of the level of social intelligence of male student teachers were found to be 101.81 and 9.69 respectively. Similarly, the mean score and standard deviation of the level of social intelligence of female student teachers were found to be 103.41 and 8.57 respectively. Therefore, it may be inferred that male and female student teachers had average level of social intelligence. Although male and female student teachers fall on the same levels of social intelligence, a comparison of their mean scores revealed that the mean score of male student teachers was slightly higher as compare to female student teachers but not statistically significant.

Figure 6

Overall mean of social intelligence of student teachers of Mizoram – gender wise



Detailed gender wise analyses of student teachers in Mizoram falling on the different categories of social intelligence are shown in Table 4.12 and Figure 7.

Table 4.12

Overall levels of social intelligence of student teachers of Mizoram – gender wise

Gender	N	Extremely high	High	Above Average	Average	Below Average	Low	Extremely low
Male	175	3 (1.71%)	6 (3.43%)	58 (33.14%)	48 (27.43%)	32 (18.29%)	22 (12.57%)	6 (3.43%)
Female	276	6 (2.17%)	16 (5.79%)	70 (25.36%)	113 (40.94%)	48 (17.39%)	13 (4.71%)	10 (3.62%)

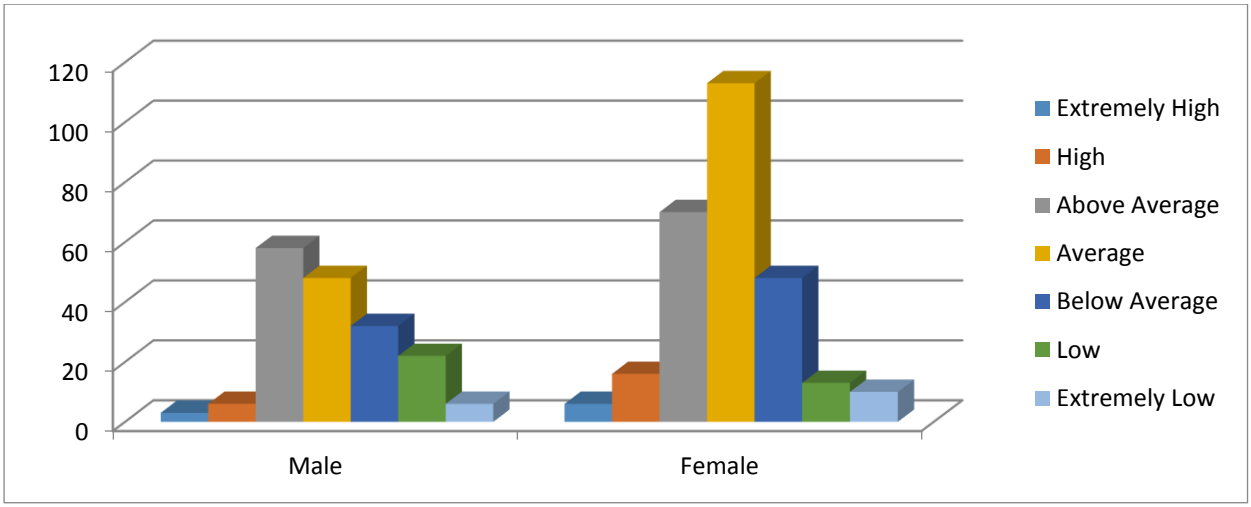
Table 4.12 and Figure 7 reflect the detailed analysis of the levels of social intelligence of student teachers in Mizoram – gender wise. Out of 175 male student teachers, 3 (1.71%) were having extremely high level of social intelligence, 6 (3.43%) student teachers were having high level of social intelligence. Out of 175 male student teachers 58 (33.14%) male student teachers were having above average level of social intelligence, 48 (27.43%) male student teachers were having average level of social intelligence, 32 (18.29%) male student teachers were having below average level of

social intelligence, 22 (12.57%) male student teachers were having low level of social intelligence and 6 (3.43%) male student teachers were having extremely low level of social intelligence.

Out of 276 female student teachers , 6 (2.17%) were having extremely high level of social intelligence and 16 (5.79%) student teachers were having high level of social intelligence, 70 (25.36%) were having above average level of social intelligence, 113 (40.94%) female student teachers were having average level of social intelligence, 48 (17.39%) female student teachers were having below average level of social intelligence and 13 (4.71%) female student teachers were having low level of social intelligence and 10 (3.62%) female student teachers were having extremely low level of social intelligence.

Figure 7

Overall levels of social intelligence of student teachers in Mizoram – gender wise



4.5.1. Difference in the levels of social intelligence between male and female student teachers of Mizoram

To find out the significant differences between male and female student teachers on their level of social intelligence, a hypothesis was framed and inferential statistic such as t-test was employed.

Hypothesis 2 states that, 'There is no significant difference among the social intelligence of student teachers in Mizoram with reference to their gender.'

Table 4.13

Comparison of the levels of social intelligence between male and female student teachers of Mizoram

Gender	N	Mean	Std. Deviation	SEM	df	t-value	Significant Level
Male	175	101.81	9.69	0.73	449	1.78	NS
Female	276	103.41	8.58	0.51			

As shown in Table 4.13, the t-value for the significance of difference in the levels of social intelligence between male and female student teachers of Mizoram was found to be 1.78. Therefore, the hypothesis which was framed 'There is no significant difference in the levels of social intelligence between male and female student teachers of Mizoram' was accepted. Considering their mean scores, a slight difference was found favouring male student teachers but not statistically significant.

The finding of the present hypothesis 2 conducted in Mizoram can be further assimilated with the findings conducted by some studies which showed no significant differences between male and female student teachers in their level of social intelligence (Barbera et al. 2003, Dixit & Kaur 2015, Rani 2016, Tiakala 2016, Arthi & Tamilselvi 2016**,** Rani & Shaili 2017, Bhattacharyya & Sanghamitra 2018, Asgharet et al. 2019). Notwithstanding the findings of the present study in hypothesis 2, some studies found that the level of social intelligence of female was higher than male (Sumanlata & Rajat 2013, Uygun et al. 2020).

4.5.2. Detailed study of gender difference on the eight dimensions of social intelligence scale

An attempt was made to show the significant difference between male and female student teachers on the eight dimensions of social intelligence scale viz. patience, co-operativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humour and memory. The social intelligence scale was divided into five parts; the first part contains 36 questions to evaluate patience (8 questions), co-operativeness (11 questions), confidence (8 questions) and sensitivity (9 questions). The second part contains 3 questions to check recognition of social environment. The third part contains 7 questions to evaluate tactfulness. The fourth part contains 8 questions to evaluate sense of humour. The fifth part contains 12 pictures to check memory. Descriptive statistics such as mean scores, standard deviation and t-value were employed (Table 4.14 and Figure 8).

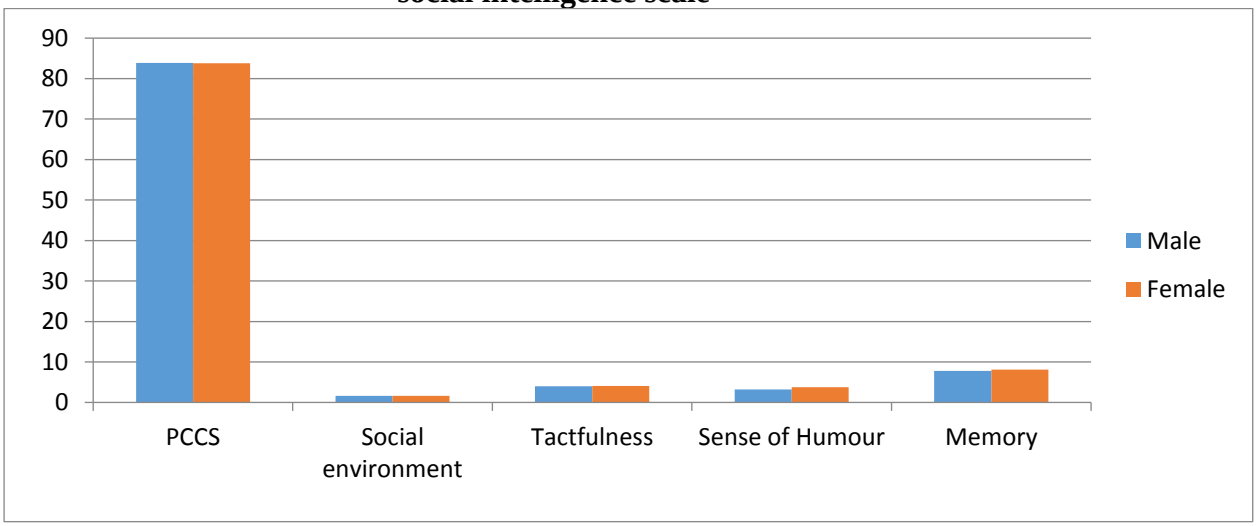
Table 4. 14

Gender difference of student teachers of Mizoram on the eight dimensions of social intelligence scale

Dimensions	Gender	N	Mean	Std Deviation	SEM	t-value	p-value	Level of Significance
Part 1 Patience, Co-operativeness, Confidence & Sensitivity	Male	175	83.87	9.89	.74	.06	.95	NS
	Female	276	83.81	9.78	.59			
Part II Recognition of Social Environment	Male	175	1.64	.85	.06	.39	.70	NS
	Female	276	1.61	.98	.05			
Part III Tactfulness	Male	175	3.99	1.24	.09	.60	.54	NS
	Female	276	4.07	1.19	.07			
Part IV Sense of Humour	Male	175	3.18	1.49	.11	3.90	.00	S
	Female	276	3.72	1.48	.09			
Part V Memory	Male	175	7.78	2.75	.20	1.39	.17	NS
	Female	276	8.13	2.73	.16			

As indicated in the Table 4.14, the t –value for the significant difference between male and female student teachers on their level of patience, co-operativeness, confidence and sensitivity was 0.06 which means there was no significant difference between male and female student teachers on their level of patience, co-operativeness, confidence and sensitivity. The t-value for the significant difference between male and female student teachers on their level of recognition of social environment was 0.39 which means there was no significant difference between male and female student teachers on their level of recognition of social environment. The t-value for the significant difference between male and female student teachers on their level of tactfulness was 0.60 which means there was no significant difference between male and female student teachers on their level of tactfulness. The t-value for the significant difference between male and female student teachers on their sense of humour was 3.90 which mean there was significant difference between male and female student teachers on their sense of humour. A comparison of their mean scores showed that female student teachers had higher mean score as compare to male student teachers which means that female student teachers had higher level of sense of humour. The t-value for the significant difference between male and female student teachers on their level of memory was 1.39 which means there was no significant difference between male and female student teachers on their level of memory.

Figure 8
Gender difference of student teachers of Mizoram on the eight dimensions of social intelligence scale



*PCCS = Patience, Co-operation, Confidence and Sensitivity

4.6. Objective No. 6: ICT competency levels of student teachers of Mizoram with reference to their gender.

To find out the level of ICT competencies between male and female student teachers of Mizoram, descriptive statistics such as mean, standard deviation and t-test were employed and the detailed study of the results are reflected in Table 4.15, Table 4.16, Table 4.17, Figure 9 and Figure 10.

Table 4.15

Overall ICT competencies of student teachers of Mizoram – gender wise

Gender	N	Mean	Std. Deviation	SEM
Male	175	59.56	12.53	4.50
Female	276	57.75	10.66	3.48

It is clearly seen from Table 4.15 and Figure 9 that the mean score and standard deviation of the level of ICT competencies of male student teachers were

found to be 59.56 and 12.53 respectively. Similarly, the mean score and standard deviation of the level of ICT competencies of female student teachers were found to be 57.75 and 10.66 respectively. Therefore, it may be inferred that male and female student teachers had average level of ICT competencies.

Figure 9

Overall ICT competencies of student teachers of Mizoram – gender wise

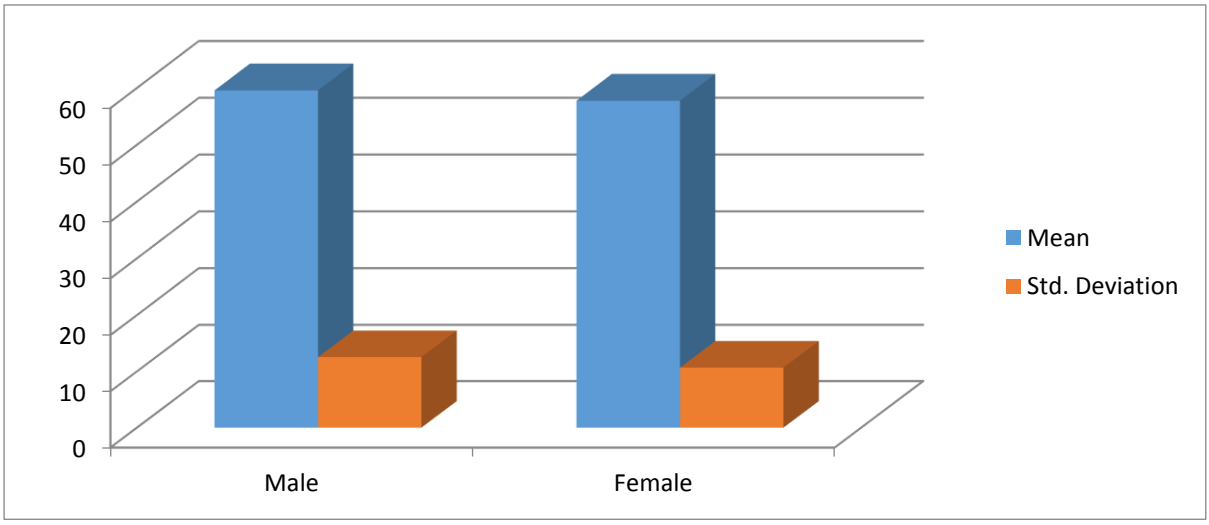


Table 4.16

Overall levels of ICT competencies of student teachers of Mizoram – gender wise

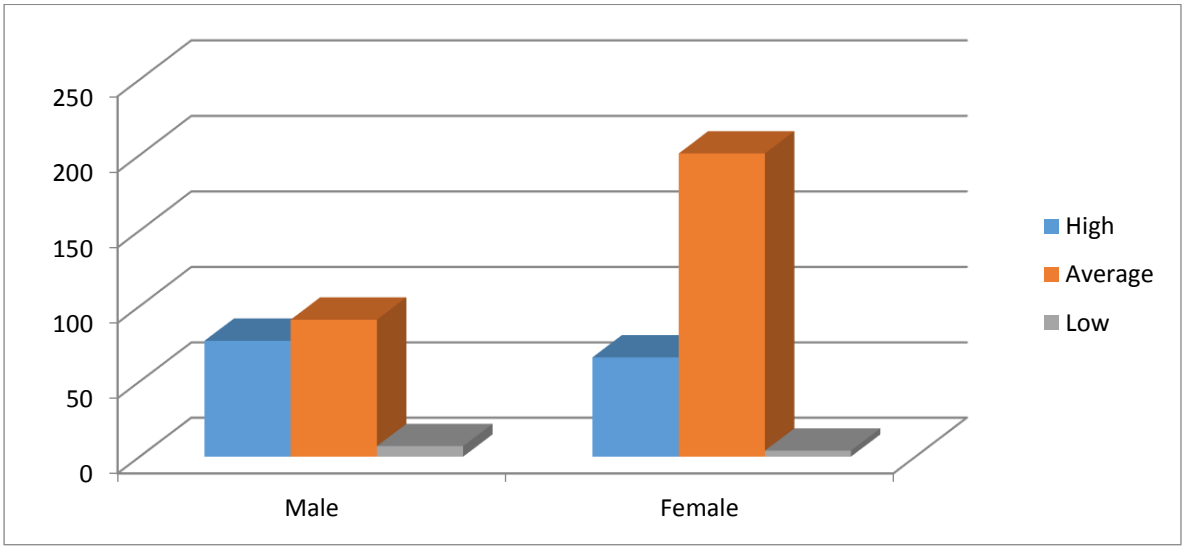
Gender	N	High	Average	Low
Male	175	77 (44%)	91 (52%)	7 (4%)
Female	276	66 (23.91%)	201 (72.83%)	4 (1.45%)

From Table 4.16 and figure 10 we can interpret the detailed information of male and female student teachers falling on different categories of ICT competencies. Out of 175 male student teachers, 91 (52%) were found to be having average level of

ICT competencies, 77 (44%) male student teachers were found to be having high level of ICT competencies and only 7 (4%) male student teachers were found to be having low level of ICT competencies. Out of 276 female student teachers, 201 (72.83%) were found to be having average level of ICT competencies, 66 (23.91%) were found to be having high level of ICT competencies and only 4(1.45%) were found to be having low level of ICT competencies.

Figure 10

Overall levels of ICT competencies of student teachers of Mizoram – gender wise



4.6.1. Difference in the levels of ICT competencies between male and female student teachers of Mizoram

To find out the significant differences between male and female student teachers on their level of ICT competencies, a hypothesis was framed and inferential statistic such as t-test was used.

Hypothesis 3 states that, 'There is no significant difference in the levels of ICT competencies between male and female student teachers of Mizoram.'

Table 4.17

Comparison of the levels of ICT competencies between male and female student teachers of Mizoram

Gender	N	Mean	SD	SEM	t-value	p-Value	Significant level
Male	175	59.56	12.53	0.95	1.58	0.11	NS
Female	276	57.75	10.66	0.64			

As shown in Table 4.17, the t-value for the significance of difference in the levels of ICT competencies between male and female student teachers of Mizoram was found to be 1.58. Therefore, the hypothesis which was framed 'There is no significant difference in the level of ICT competencies between male and female student teachers of Mizoram' was accepted. Comparison of their mean scores showed that male student teachers were having higher mean score than female student teachers which means male student teachers have higher level of life skills than female student teachers.

The findings of the present hypothesis 3 conducted in Mizoram can be further assimilated and incorporated with the finding of the study conducted in other countries, their findings indicated no significant gender differences in their level of ICT proficiency (Teck & Lai 2011, Yusuf & Balogun 2011).

4.6.2. Detailed Study on gender difference of student teachers of Mizoram on the three dimensions of ICT Scale

An attempt was made to show the significant difference between male and female student teachers on the three dimensions of ICT scale. The ICT scale was divided into three dimension to evaluate the Basic (9 items), Intermediate (6 items) and Advanced (9 items) ICT competency. The student teachers were required to give a response to every statement according to his or her skills/competences, on the four

point scale provided for each item such as, With Ease, With Some Difficulty, With lot of Difficulty and Unable having a numerical weight age from 3 to 0. The mean scores, standard deviation and t-value were calculated using descriptive statistics (Table 4.18 and Figure 11).

Table 4.18

Gender difference of student teachers of Mizoram on the three dimensions of ICT scale

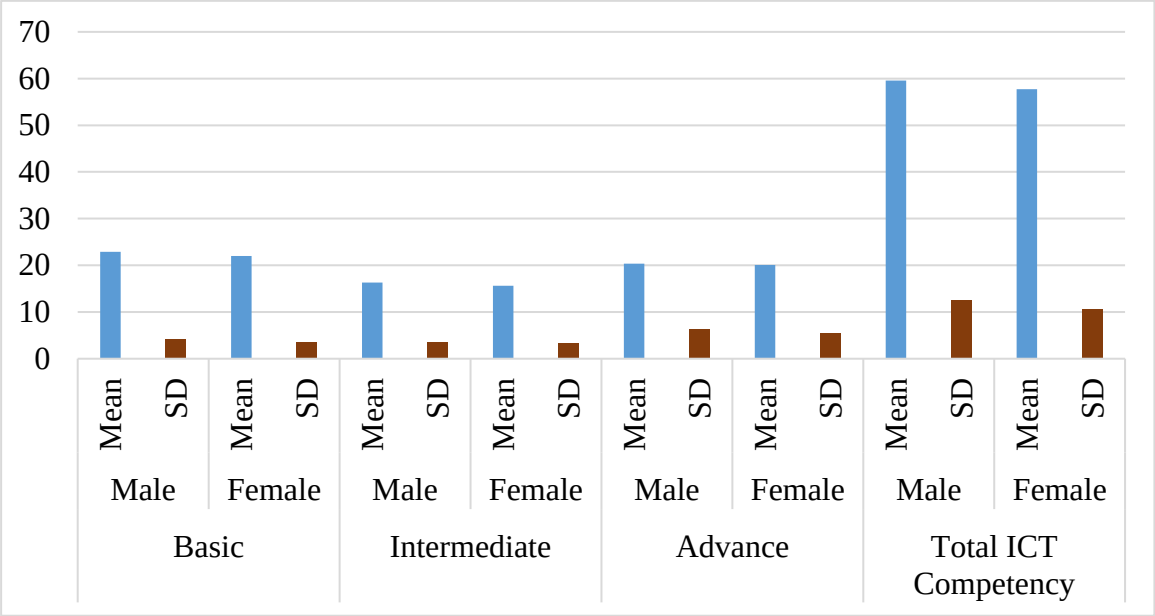
ICT Competency & Its Dimensions	Gender	N	Mean	SD	Std. Error Mean	t-value	p-Value	Level of Significance
Basic	Male	175	22.89	4.20	.32	2.34	.02	0.05
	Female	276	22.03	3.54	.21			
Intermediate	Male	175	16.31	3.57	.27	2.09	.04	0.05
	Female	276	15.62	3.34	.20			
Advanced	Male	175	20.35	6.339	.48	.44	.66	NS
	Female	276	20.10	5.41	.33			

As shown in Table 4.18, the t-value for the significant difference between male and female student teachers on their level of basic ICT Competency was 2.34 and significant at 0.05 level. A comparison of the mean scores of male and female student teachers revealed that male student teachers had higher mean score as compared to the mean score of female student teachers. The t-value for the significant difference between male and female student teachers on their level of intermediate ICT Competency was 2.09 and significant at 0.05 levels. A comparison of the mean scores of male and female student teachers revealed that the mean score of male student teachers had higher mean score as compared to the mean score of

female student teachers. There was no significant difference between male and female student teachers on their level of advanced ICT competency.

Figure 11

Gender difference of student teachers of Mizoram on the three dimensions of ICT scale



4.7. Objective No. 7: Effect of life skills on social intelligence of student teachers of Mizoram.

The seventh objective is to find out the effect of life skills on social intelligence of student teachers in Mizoram. It was hypothesized that high level of life skills will positively predict high social intelligence. So, null hypothesis was framed and the data collected was analyzed using Pearson r correlation and linear regression analysis was used to test the hypothesis. The result of correlation analysis is presented in Table 4.20. The correlation is 0.177 which is positive and found significant at 0.01 levels which indicate significant and positive relationship between life skill and social

intelligence. In addition, the result of linear regression analysis on the impact of life skills on social intelligence is presented in Table 4.19 and Figure 12. The estimated regression coefficient of life skill (i.e. 0.287) was found significant at 0.01 level, while the F-statistic of the ANOVA was also highly significant. Thus, it may be concluded that the life skills of the student teachers in Mizoram has positive effect on the social intelligence. This is against the hypothesis that 'There is no significant effect of life skill on social intelligence of student teachers in Mizoram.' Thus, it is concluded that life skill has positive effect on social intelligence.

Table 4.19

Result of regression analysis (Ref. Ho.5)

Dependent Variable : Social Intelligence

Independent (Predictor): Life Skills

Model	**Coefficients**	**t – Stat.**	**Sig. Level**	**R-square**	**F-Stat**
Constant	95.05	46.065**	.000	0.031	14.54**
Life Skills	0.287	3.814**	.000		

**significant at 0.01

Table 4.19 shows the summary of the regression analysis and reveals that 3.1 percent of variance in life skills was accounted by social intelligence. The dependent variable (Social Intelligence) was regressed on predicting variable (life skills) to test the null hypothesis Ho. 5. Though the R-square is low at 0.031 (i.e. 3.1%), the highly significant F-statistic ($F(1,450) = 14.54$, $p < 0.001$) implicate the impact of life skills on social intelligence. Therefore, the result clearly revealed that life skills positively affect social intelligence.

Therefore, the null hypothesis that assumes no significant effect of life skill on social intelligence of student teachers in Mizoram was rejected. The same results can be subsumed with the similar studies conducted in India shows that there was a significant effect of life skill training on social intelligence (Tiakala 2016, Sowmyashree & Sreenivasa 2019).

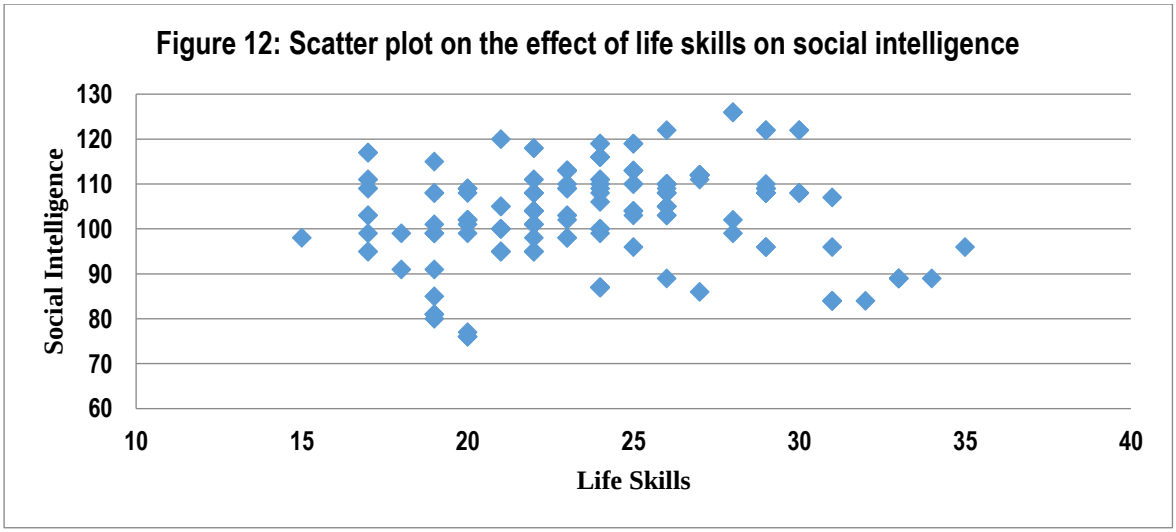
Table 4.20

Correlation between life skills and social intelligence of student teachers of Mizoram.

		Life Skills	**Social Intelligence**
Life Skills	Pearson Correlation	1	.177**
	Sig. (2-tailed)		.000
	N	451	451
Social Intelligence	Pearson Correlation	.177**	1
	Sig. (2-tailed)	.000	
	N	451	451
**. Correlation is significant at the 0.01 level (2-tailed).			

As shown in Table 4.20, Pearson product-moment correlation was run to determine the relationship between life skills and social intelligence. The result reveals that there is a positive correlation between life skills and social intelligence, which is statistically significant (r=.177, n = 451, p=.000).

Similar finding with the present study conducted by other researchers showed that life skills training had a significant and positive impact on social skills (Tiakala 2016, Saiedeh et al. 2017).



4.8. Objective No. 8: Effect of life skills on ICT competencies of student teachers of Mizoram.

The eight objective is to find out the effect of life skills on ICT competencies of student teachers of Mizoram. It was hypothesized that high level of life skills will positively predict high level of ICT competencies. So, null hypothesis was framed and the data collected were analyzed using simple regression, and Pearson r correlation analysis was used to test the hypothesis. The statistical values obtained by employing linear regression are tabulated in Table 4.21, Table 4.22 and Figure 13.

Hypothesis 6: There is no significant effect of life skill on ICT competencies of student teachers of Mizoram.

Table 4.21

Result of regression analysis (Ref. Ho. 6)

Dependent Variable : ICT Competency
Independent (Predictor) : Life Skills

Model	Coefficients	t – Stat.	Sig. Level	R-square	F-Stat
Constant	55.218	0.851	.213	.003	1.558
Life Skills	.121	1.248	.213		

**not significant at 0.01 level, * not significant at 0.05 level.

Table 4.21 presents the summary of regression result on the effect of life skills on ICT competency. It is shown from the above table that the regression coefficients are not significant. So, it may be concluded that life skill has no significant effect on the ICT competency, which justifies the study hypothesis Ho6.

Table 4.22

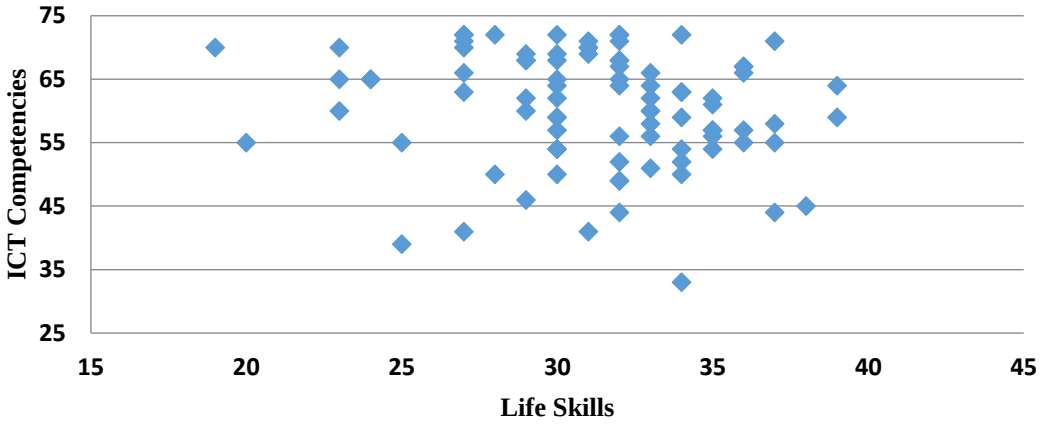
Correlation between life skills and ICT competencies of student teachers of Mizoram.

		Life Skills	ICT Competency
Life Skills	Pearson Correlation	1	.059
	Sig. (2-tailed)		.213
	N	451	451
ICT Competency	Pearson Correlation	.059	1
	Sig. (2-tailed)	.213	
	N	451	451

Table 4.21 shows the summary of the regression analysis and reveals that 03.1 percent of variance in life skills was accounted by ICT. The dependent variable (ICT competency) was regressed on predicting variable (life skills) to test the null

hypothesis 6. The estimated regression coefficient of 0.121 is not significant, and this is supplemented by the insignificant correlation coefficient in Table 4.22. Thus, the result indicate acceptance of Hypothesis 6, thereby, one can conclude that life skill does not necessarily indicate ICT competencies of student teachers in Mizoram. The findings of the present study corroborate to the finding by Dhawan (2012) in Kenya found no significant effect on ICT competencies and Life Skills was found.

Figure 13: Scatter plot on the effect of life skills on ICT competencies



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CHAPTER V

MAJOR FINDINGS, DISCUSSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH AND CONCLUSION

The present chapter deals with the major findings from the study, discussion from the findings of the study, educational implications, recommendations for improving life skills to enhance social intelligence and ICT competency and suggestions for further research.

5.0 Major Findings

Important findings in line with the study's objectives and discussions are reported in the following:

5.1. Findings and discussion regarding the level of life skills of student teachers of Mizoram

Findings:

The findings of the present study revealed that out of 451 student teachers, 216 (47.89%) student teachers had high level of life skills, 190 (42.13%) student teachers had average life skills and 45 (9.98%) student teachers had low level of life skills. The mean score and standard deviation of the level of life skills of 451 student teachers in Mizoram were found to be 26.95 and 5.54 respectively. Therefore, it may be inferred that student teachers of Mizoram had average level of life skills.

Discussion:

The findings of the present study show that student teachers of Mizoram had average level of life skills. Similar research studies across India were also taken up by some researchers and found that the level of life skills of B. Ed students had average level of life skills (Sandhu 2014, Sridevi & Amuthavalli 2019**,** and Das 2019). In contrast to the results of the present research, Vijayalakshmi (2019) in Tamil Nadu

discovered that B.Ed. teacher trainees had a very high degree of life skills. A research in Haryana conducted by Sandhu (2014) revealed that 24% of student teachers had low level life skills, 4% of student teachers had low level life skills, and 72% of student teachers had medium level life skills. In Karnataka, Dayaprasad (2019) discovered that 49.4% of B.Ed. teacher candidates had poor life skills. 13.6% had excellent levels of life abilities, and 37.0% had moderate level of life skills.

5.2. Findings and discussion regarding the level of Social Intelligence of student teachers of Mizoram

Findings:

The results of the present research revealed that student teachers of Mizoram had a mean score and standard deviation of 102.79 and 9.04, respectively, for social intelligence. Thus, it can be concluded that Mizoram's student-teachers had above-average levels of social intelligence. Out of 451 student teachers, 9 (1.99%) student teachers were found to be having extremely high level of social intelligence, 22 (4.88%) student teachers were found to be having high level of social intelligence, 128 (28.38%) of student teachers were found to be having above average level of social intelligence, 161 (35.69%) of student teachers were found to be having average level of social intelligence, 80 (17.74%) of student teachers were found to be having below average level of social intelligence, 35 (7.76%) of student teachers had low level of social intelligence and 16 (3.55%) student teachers had extremely low level of social intelligence.

Discussion:

The findings of the present study revealed that student teachers of Mizoram had above average level of social intelligence. The finding of the present study conducted in Mizoram can be further assimilated and incorporated with the finding of the similar study conducted across India and aboard, the results indicated that B. Ed students were having above average and average level of social intelligence (Parveen Rani 2018, Kharluni & Erigala 2018, Uygun et al. 2020, Jasleen et al.2021). Jeloudar

and Yunus (2011) in Malaysia found that secondary school teachers had average level of social intelligence. Jeloudar et al. (2012) found that school teachers from India, Malaysia and China had average level of social intelligence. Kharluni and Erigala (2018) in Meghalaya found that 1.4% of secondary school students had very high level of social intelligence, 6.9% had high level of social intelligence, 57.4% had average level of social intelligence, 26.9% had low level of social intelligence and 7.4% had very low level of social intelligence. Anbalagan and Kasirajan (2020) in Tamil Nadu found that 15.7% of student teachers had low level of social intelligence, 69% of student teachers had moderate level of social intelligence and 15.3% of student teachers had high level of social intelligence.

5.3. Findings and discussion regarding the level of ICT Competencies of student teachers of Mizoram

A Likert type ICT competencies scale has constructed for the present study. Reliability was measured by using Cronbach's alpha and spearman brown prophecy coefficient. The internal consistency measure Cronbach's alpha obtained was found to be 0.881 and thus it was interpreted that the test was highly reliable. Similarly Spearman Brown Prophecy coefficient and the Gultman split half coefficient value were 0.9 and 0.887 respectively. Content validity was established by giving the scale to several experts in the field of ICT with a request to rate the items and provide feedback. It was found that the scale was sufficiently valid based on their comments and responses.

Findings:

According to the results of the present study, student-teachers of Mizoram had an ICT competency mean score that was 58.45 and 11.44 on a standard deviation scale. Thus, it can be said that Mizoram's student-teachers had an average level of ICT proficiency. Out of 451 student teachers, 148 (32.81%) student-teachers had high level of ICT proficiency, 292 (64.74%) student teachers had average level of ICT competencies, and 11 (2.4%) had low level of ICT competencies. Thus, the finding

indicates that more than half of the student teachers had average level of ICT competencies.

Discussions:

ICT Scale developed by the investigator was administered to 451 student teachers of Mizoram, the findings of the present study found that student teachers of Mizoram were found to be having average level of ICT competencies. Similar study conducted by Vasilka et al. (2015) in Macedonia found that 25%, one-fourth of the teachers in primary schools had below basic ICT competency, 17% had basic knowledge and skills to operate a computer, and more than half, 58 had proficient level of ICT competencies. Gupta (2017) in Noida found that 53.3% of B.Ed. trainees were having below average level of ICT competencies, 46.6% were found to be having above average level of ICT competencies.

5.4. Findings and discussion regarding the levels of life skills of student teachers of Mizoram with reference to their gender

Findings:

According to the findings of this study, male student teachers had a mean score of 27.29 and a standard deviation of 5.59 in terms of their degree of life skills. Comparable results were obtained for female student teachers, with mean scores and standard deviations of 26.73 and 5.49, respectively. Therefore, it may be inferred that male student teachers and female student teachers had average level of life skills. There was only a slight difference on their mean scores and the obtained difference may be attributed to chance factor. Out of 145 male student teachers 87 (49.71%) were found to be having high level of life skills, 69 (39.43%) male student teachers were found to be having average level of life skills and 19 (10.86%) male student teachers were found to be having low level of life skills. Out of 276 female student teachers, 129 (47.44%) female student teachers were having high level of life skills, 121 (43.84%) female student teachers were having average level of life skills and 26 (9.4%) female student teachers were having low level of life skills.

An inferential statistic like the t-test was used to determine whether there were any appreciable disparities in the level of life skills between Mizoram's male and female student teachers. The t-test result revealed that there was no discernible difference in the levels of life skills between male and female student teachers of Mizoram. A minor differential favouring male student-teachers was discovered when their mean scores were taken into account, although it was not statistically significant.

Discussions:

There was no discernible difference between male and female student-teachers of Mizoram in terms of their level of life skills. A small difference favouring male student-teachers was discovered when their mean scores were taken into account, but it was not statistically significant. There are no discernible differences between male and female student instructors' levels of life skills, according to the results of this research, which are consistent with those of other studies conducted in India and abroad (Sarla et. al 2022, George 2021, Alaka 2019, Das 2019,Vijayalakshmi 2019, Kharluni & Erigala 2018, Vijayarani & Geetha 2017, Sandhu 2014, Asmitaben 2012**,** Garg 2011,). In contrast to the findings of the present study, some studies found that male were having higher level of life skills as compared to female (Ajitha2007, King 1999. Contrasting to the findings of Ajitha (2007), King (1999), Dayaprasad (2019) female were having higher level of life skills (Sridevi & Amuthavalli 2019, Sridevi 2019).

5.5. Findings and discussion regarding the level of social intelligence of student teachers of Mizoram with reference to their gender.

Findings:

The present study found that female student-teachers had a mean social intelligence score of 103.41 and a standard deviation of 8.57. Male student-teachers mean score and standard deviation in their level of social intelligence were found to be 101.81 and 9.69, respectively. Therefore, it can be said that both male and female student teachers had average levels of social intelligence. However, a comparison of their mean scores showed that the mean score of male student teachers were slightly

higher than those of female student teachers, though this difference was not statistically significant. Out of 175 male student teachers, 3 (1.71%) were having extremely high, 6 (3.43%) student teachers had high level of social intelligence, 48 (27.43%) male student teachers were having average level of social intelligence, 58 (33.14%) male student teachers were having above average level of social intelligence, 32 (18.29%) of male student teachers were having below average level of social intelligence, 22 (12.57%) male student teachers were having low level of social intelligence and 6 (3.43%) male student teachers were having extremely low level of social intelligence. Out of 276 female student teachers, 6 (2.17%) were having extremely high level of social intelligence, 16 (5.79%) female student teachers had high level of social intelligence, 70 (25.36%) were having above average level of social intelligence, 113(40.94%) female student teachers were having average level of social intelligence, 48 (17.39%) female student teachers were having below average level of social intelligence, 13 (4.71%) female student teachers were having low level of social intelligence and 10 (3.62%) female student teachers were having extremely low level of social intelligence.

In order to find out the significant differences between male and female student teachers of Mizoram on their level of social intelligence, inferential statistic such as t-test was used and it was found that there was no significant difference in the levels of social intelligence between male and female B. Ed students of Mizoram. Considering their mean scores, a slight difference was found favouring male student teachers but not statistically significant. An attempt was made to show the significant difference between male and female student teachers on the eight dimensions of social intelligence scale viz. patience, co-operativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humour and memory. The social intelligence scale was divided into five parts; the first part contains 36 questions to evaluate patience (8 questions), co-cooperativeness (11 questions), confidence (8 questions) and sensitivity (9 questions). The second part contains 3 questions to check recognition of social environment. The third part contains 7 questions to evaluate tactfulness. The fourth part contains 8 questions to evaluate sense of humour. The fifth part contains 12 pictures to check memory. Results of the detailed analysis showed that there was no significant difference between male and female student teachers on their level of patience, co-cooperativeness, confidence and sensitivity. The t-test result showed that there was no significant difference between

male and female student teachers on their level of recognition of social environment. The t-value for the significant difference between male and female student teachers on their level of tactfulness revealed that there was no significant difference between male and female student teachers on their level of tactfulness. The t-value for the significant difference between male and female student teachers on their sense of humour revealed that there was significant difference between male and female student teachers on their sense of humour, female student teachers showed higher level in their sense of humour as compared to the male student teachers. The t-value for the significant difference between male and female student teachers on their level of memory revealed that there was no significant difference between male and female student teachers on their level of memory.

Discussions:

No significant difference was observed in the levels of social intelligence between male and female student teachers of Mizoram. The finding of the present study conducted in Mizoram can be further assimilated with the findings conducted by some studies which showed no significant differences between male and female student teachers in their level of social intelligence (Barbera et al. 2003, Gnanadevan 2007, Dixit & Kaur 2015**,** Rani 2016, Tiakala2016, Arthi & Tamilselvi 2016**,** Rani & Shaili 2017**,** Kharluni & Erigala 2018**,** Bhattacharyya & Sanghamitra 2018**,** Asgharet al. 2019, Jasleen et al. 2021, Kaur et al. 2021).Notwithstanding the findings of the present study, Uygun et al. (2020) in Turkey found that female pre-service teachers had higher level of social intelligence as compared to male pre-service teachers.Kamil and Bilal (2020) in Turkey found that the level of social intelligence of female pre-service social science teachers were higher as compare to male pre-service social science teachers.

A study conducted by Arthi and Tamilselvi (2016) in Tamil Nadu found that there was no significant difference between male and female B. Ed student teachers in their level of social intelligence. Detailed analysis of the eight dimensions of social intelligence revealed that there were no significant difference between male and female B. Ed student teachers in co-cooperativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humour and memory. The

findings of their study also found that there was significant difference between male and female B. Ed student teachers in the patience dimension, female student teachers had higher level of patience as compared to male B. Ed student teachers. A study conducted by Kaur et. al (2021) in Punjab found that there was no significant difference between male and female teacher trainees in their level of social intelligence. Detailed analysis of the eight dimensions of social intelligence revealed that there were no significant difference between male and female teacher trainees in patience, confidence, sensitivity and tactfulness. The findings of their study revealed that there were significant difference between male and female teacher trainees in cooperativeness, recognition of social environment, sense of humour and memory; male teacher trainees had higher level of memory, sense of humour and recognition of social environment as compared to female teacher trainees. The result of their study also revealed that female teacher trainees showed higher level in the dimension of cooperativeness.

5.6. Findings and discussion regarding the ICT competencies level of student teachers of Mizoram with reference to their gender.

Findings:

The findings of the present study revealed that the mean score and standard deviation of the level of ICT competencies of male student teachers were found to be 59.56 and 12.53 respectively. Similarly, the mean score and standard deviation of the level of ICT competencies of female student teachers were found to be 57.75 and 10.66 respectively. Therefore, it may be inferred that male and female student teachers had average level of ICT competencies. Out of 175 male student teachers, 91 (52%), were having average level of ICT competencies, 77 (44%) of male student teachers were having high level of ICT competencies and 7 (4%) of male student teachers were having low level of ICT competencies. Out of 276 female student teachers, 201 (72.83%) were having average level of ICT competencies, 66 (23.91%) were having high level of ICT competencies and only 4 (1.45%) were having low level of ICT competencies.

A hypothesis was formulated and an inferential statistic like the t-test was used to determine whether there were any significant variations in the levels of ICT capabilities between male and female student teachers of Mizoram. It was discovered that there were no such disparities. Male student teachers had higher mean scores than female student teachers, which indicate that male student teachers had higher level of ICT competencies than female student teachers, albeit this difference is not statistically significant. Studying the stark differences between male and female student instructors on the three ICT aspects was attempted. The ICT scale was divided into three dimensions to evaluate the Basic (9 items), Intermediate (6 items) and advanced (9 items) ICT competency. The significant difference between male and female student teachers on their level of basic ICT competencies was significant at 0.05 levels. A comparison of the mean scores of male and female student teachers in basic ICT competencies revealed that the mean score of male student teachers was higher as compared to the mean score of female student teachers. The significant difference between male and female student teachers on their level of intermediate ICT competencies was significant at 0.05 levels. A comparison of the mean score of male and female student teachers in intermediate ICT competencies revealed that the mean score of male student teachers had higher mean score as compared to the mean score of female student teachers. There was no significant difference between male and female student teachers on their level of advanced ICT competencies.

Discussions:

No significant difference was found in the levels of ICT competencies among male and female student teachers of Mizoram. Comparison of their mean scores showed that male student teachers were having higher mean score than female student teachers which means male student teachers have higher level of ICT competencies than female student teachers but not statistically significant. Detailed analysis of the three dimensions of ICT competencies between male and female student teachers showed that there was significant difference between male and female student teachers in their level of basic and intermediate ICT competencies, male student teachers had higher basic and intermediate ICT competencies as compared to female student teachers but not statistically significant. The result of the gender comparison

on advanced ICT competencies showed that there was no significant difference between male and female student teachers on their level of advanced ICT competencies.

Other researchers also looked at studies on the ICT proficiency of teachers and teacher trainees, and they discovered no appreciable differences between male and female B. Ed student teachers (Cavas et al. 2009, Gulkane 2011, Yusuf & Balogun 2011, Samson 2013, Deivam 2016, Durgadevi & Ahamed 2017, Tondeura 2018, Lin et al. 2022). The results of the current study, which was conducted in Mizoram, can be correlated with those of the study, which was conducted in Nigeria; they showed that there was no discernible difference in male and female student-teachers' use of ICT (Yusuf & Balogun 2011).Another study conducted in Malaysia indicated that there were no significant gender differences in terms of word processing, presentation, spreadsheet, World Wide Web, email, database, social networking and utility competency among the pre university students (Teck & Lai 2011).

5.7. Findings and discussion regarding the effect of life skills on social intelligence of student teachers of Mizoram.

Findings:

It was hypothesized that high level of life skills will positively predict high level of social intelligence. The data collected were analyzed using Pearson r correlation and linear regression analysis was used to test the 'Ho. 5: There is no significant effect of life skills on social intelligence of student teachers of Mizoram.' The result of correlation analysis revealed that the correlation was 0.177 which was positive and found significant at 0.01 levels which indicate significant relationship between life skill and social intelligence. In addition, the result of linear regression analysis on the impact of life skills on social intelligence showed that the estimated regression coefficient of life skill (i.e. 0.287) was found significant at 0.01 level, while the F-statistic of the ANOVA was also highly significant. Thus, it may be concluded that the life skills of the student teachers of Mizoram have positive effect on the social intelligence.

Discussion:

The results of this study showed that high levels of social intelligence among student teachers of Mizoram were predicted by high levels of life skills; vice versa, as life skills level rise, so do social intelligence level. Several more studies highlight the consequences, influence, and connection between social intelligence and life skills. The same results can be subsumed with the study conducted in Bangaluru showed that there was a significant effect of life skill training on social intelligence among private school adolescents (Sowmyashree & Sreenivasa 2019). A study conducted in Iran showed that life skills training had a significant and positive impact on social skills in the experimental group, whereas there was no significant difference in the control group (Saiedeh et al. 2017). Another study conducted in Nagaland indicated social intelligence was significantly related with life skills (Tiakala 2016).

5.8. Findings and discussion regarding the effect of life skills on ICT competencies of student teachers of Mizoram.

Findings:

It was hypothesized that high level of life skills will positively predict high ICT competencies**.** From the results of regression analysis, the regression coefficients are not significant. So, it may be concluded that life skill has no significant effect on the ICT competency, which justifies the study hypothesis 'Ho.6: There is no significant effect of life skills on ICT competencies of student teachers of Mizoram'. The regression analysis revealed that 03.1 percent of variance in life skills was accounted by social intelligence. The dependent variable (ICT competency) was regressed on predicting variable (life skills) to test the null hypothesis (Ho6). Life skills significantly does not predict the ICT competencies, and the calculated $F(1,450) = 14.54$, $p < 0.001$.

Discussion:

From the results of regression analysis on impact of life skills on ICT competencies, the regression coefficients are not significant which means if the level of life skills increases the level of ICT competencies level may or may not increase.

The Pearson r correlation analysis showed relationship between life skills and ICT competencies to some extent. The findings of the present study corroborate to the finding by Dhawan (2012) in which the research results revealed that boys are found to prefer more of Executive and Scientific areas whereas girls were found to be more inclined towards Literary and Household areas. No significant interaction effect of ICT competencies and life skills was found on vocational preference of 11th class students and ICT competencies have significant influence on life skills of both boys and girls.

5.9 Educational Implications

Teachers set an example for their pupils by modelling behaviour in the classroom and outside of the school. It is impossible to overstate the role and value of teachers in society. In the area of education or in a particular teaching-learning scenario, the teacher is the most important agent who disseminates information, sets the schedule, chooses reading materials, assumes the position of topic expert, assesses learning outcomes, and aids students in overcoming obstacles and personal issues. He establishes the bar and cultivates what is admirable. The social intelligence of the student teachers was shown to be significantly impacted by life skills in the current study, and these findings have implications for teachers, administrators, educationalists, and of course students. According to the current study, social intelligence and life skills are positively correlated, thus student instructors who have strong life skills will also have strong social intelligence. A high degree of life skills aids in one's ability to work effectively and efficiently as a teacher. It helps in reducing the antisocial activities, reduces the stress, helps in controlling the emotions and establishes good relationship between teacher and student for effective teaching-learning. Life skills education is an important subject which must be taught in our educational institutions especially in pre-service teacher education. Thus, there is a direct need of integrating life skills in the curriculum of pre-service training institutions. In order to transact the curriculum successfully, educator must be trained continuously to develop the life skills in the student teachers properly. Successful integration of life skills can be achieved through subjective as well as practical tasks. Besides practice teaching, classroom discussion to provide opportunities to learn

solving problems and to enable learners to have an in-depth understanding of the topic and develops skills, in listening, assertiveness, and empathy, group task to maximize students engagement and interactions to develop and learn cooperation, collaboration with others, and debates to provide the chances to discuss issues in depth and creatively can be introduced to integrate life skills in teaching practice programme.

From the findings of the present study, majority of the student teachers of Mizoram had average level of life skills and social intelligence and there were no gender differences on their level of life skills and social intelligence of student teachers of Mizoram. The study also revealed that the level of life skills of student teacher of Mizoram has positive effect on the level of social intelligence of student teachers of Mizoram, which implies that student teachers who have high level of life skills will also have high level of social intelligence, if the level of life skills increases the level of social intelligence will increase and vice versa. These results will give immense help to students, teachers, educational administrators, stakeholders and college counsellors to identify the social problem of the students and provide them the adequate solution for their problem through life skills training and it is important for the teachers' educator to not only influence the student teachers academically, but also socially and morally. The findings of the present study emphasize the importance of life skill centred curriculum in teacher training institutions. So teachers must develop the interpersonal relationship skills, self-awareness, empathy, coping with stress, coping with emotion, critical thinking skills, creative thinking skills, problem-solving skills, and effective communication skills, to receive constructive feedback, to cooperate and collaborate with others, and also inculcate these skills within their training period. The curriculum, teaching designs and classroom environment of the teacher training institutions should be such that it inculcates the life skills and social skills of student teachers. The curriculum developer and curriculum coordinator need to delineate life skill development programmes and also integrate it as a part of pre-service curriculum of Mizoram. Curriculum should be focused at enhancing the social intelligence, life skills and ICT competencies of the each student teacher.

The present study revealed that life skills have no significant effect on the ICT competencies of student teachers of Mizoram, which implies that an increase in the level of life skills will not predict increase in the competencies level of ICT of student teachers. The findings of the present study also revealed that majority of the student

teachers of Mizoram had high and average level of ICT competencies; the probable reason might be that B.Ed. curriculum has been designed, modified and revised over the years at regular intervals with the sole aim and objective of developing effective teaching skills at the fullest among the student-teachers and ICT was incorporated in the B. Ed syllabus. However, one needs to be updated and upgraded frequently with the latest software. Enhancing education through ICT requires clear and specific objective, targets and resources for achieving the purpose. Educational planners, curriculum developer, curriculum coordinator, educational administrators, academic directors, policy planners and concerned authorities must analyse the present state of the educational system, institutional arrangements and practices and identify hindrances relating to infrastructure, finance, curriculum and pedagogy and capacity building. Teachers must take into account the potentials of various ICT when they are implemented in various contexts, for various reasons, and their limitations within the nation. It is important to take into account the finest practices used by other states or nations for integrating and upgrading technology. Obsessively focused on meeting standards, teaching from scripted curriculum, and meeting test benchmarks would not prepare student teachers to acquire the necessary skills required to be a productive and efficient teacher unless intentional instruction was designed through the implementation of realistic life skills, social kills, and ICT lessons. Pre-service teacher curricula should be focused at enhancing the social intelligence, life skills, and ICT competencies of each student teacher.

5.10 Recommendations

On the basis of the present findings, the following recommendations are proposed:

1. It is recommended that NCTE in collaboration with NCERT and SCERTs should develop compulsory life skills training course for pre-service teacher trainees so as to enhance communication skills, professional/career skills, interpersonal relationship skills, cooperation and collaboration, leadership skills and management skills, as life skills based education is the means to accredit the minds of the youth in demanding situations such as personal and interpersonal skills. Consequently, adoption of life skills is the only key to

excellence. Life skills education involves active participation of the learner while teacher acts as a facilitator and mentor. Therefore, life skills education involves various activities such as oral presentations, delivering unscripted speeches, creative and critical thinking, team building exercises etc. Teachers training institutions should continue to encourage organizing programmes to facilitate communication, interpersonal communication and relationship skills, co-operate with others through classroom discussion, assigning student teachers into groups or pairing student teachers who have similar interests for project work and other collaborative activities to encourage teamwork in the classroom, seminar etc. When it comes to education and learning, the individual learner becomes the most important element for the success at every level.

2. Life skill-based education should have a proper position in the academic programme. It should not be viewed as an extracurricular activity or a kind of inactive moral instruction. The school needs to implement a learner-centric pedagogy and numerous learning chances. To create a school atmosphere that supports life-skills-based education, teachers should develop and incorporate life skills into their classroom practices. They should also work to surmount implementation challenges.

3. It is recommended that sufficient amount of multimedia-based teaching and web-based project works should be included in the teacher education curriculum. It is recommended that student teacher should have a project of preparing at least 15 lesson plans by integrating the various technologies. This will make it possible for pre-service teachers to acquire these competencies during their training period. In the present digital era, our classroom environment has changed from one way learning to a two-way learning process where both teachers and students actively participate. Our present education system has gradually become student centric. Children in the present digital era are advanced learners and since education is based on child centric education, it is imperative for all teachers to get themselves prepared

and to cope with different ICT tools so as to make the classroom teaching-learning interesting and beneficial.

4. It is recommended that crash course especially in ICT application could be conducted to improve the attitude of B. Ed trainees, as not all student teachers who have content knowledge of ICT could be effective in practical. Experimenting with technology through hands-on experience can help develop student ICT skills, therefore, student teachers must try to make maximum utilization of the ICT facilities available in their institutions. There are so many options for edtech tools such as screencastify, wakelet, remind, google workspace (docs, slides, forms, lens, drawing), headspace, ever note, duolingo, dotstroming, booklet, splashlearnetc which a teacher can use in and out of the classroom for effective teaching and learning. Making use of technology in education creates an easy-to-manage learning environment where the delivery of information is so much smoother and the learning easier. Therefore, student teachers who are the future teachers must have a good digital skill by updating themselves with new technologies. Teachers require extensive, on-going exposure to ICTs to be able to evaluate and select the most appropriate resources. In the B. Ed syllabus ICT was incorporated but beyond theory student teachers must practise the skills they learnt theoretically and continue to use them, if we do not practise continuously we would not be able to keep up with the newest developments in the technology industry we may even forget how to do basic things. There are some resources for increasing digital skills to educate themselves at home such as websites with free online courses such as Common sense education, Techboomers, GCFLearn,org., DigitalLearn,org etc. Keeping up with current tech trends is important in maintaining digital skills over time, there are numerous websites such as DigitalTrends.com, Lifewire.com, Cnet.com, Thewirecutter.com and others which are useful and convenient to keep us up with the latest tech.

5. It is highly recommended that teachers training institutions should continue to encourage organizing programmes to facilitate communication, interpersonal communication and relationship skills, co-operate with others through classroom discussions, assigning student teachers into groups or pairing-

student teachers who have similar interests for project works and other collaborative activities to encourage teamwork, goal setting and responsibility in the classroom. Teachers can also carve out a time in their curriculum to directly teach the communication skills, interpersonal relationship skills, conflict resolution, empathy, co-operation skills to their student teachers. Research based programmes such as Second Step, provide teachers and institutions with explicit lessons for social development.

6. In order to promote interpersonal skills, verbal and nonverbal communication skills, sensitivity, teamwork and cooperation skills, it is advised that schools regularly arrange lectures and workshops for student instructors. Assuring that everyone has a chance to participate in discussion forums helps develop leadership abilities, interpersonal skills, problem-solving abilities, the ability to give and receive constructive criticism, the ability to read social cues, the ability to understand humour, the ability to actively listen, the ability to be assertive, the ability to deal effectively with conflict, and the ability to cooperate and collaborate. The more we try to engage and speak with others, the more we will learn about the knack of understanding and talking, and the more our interpersonal abilities, sensitivity, our ability to communicate effectively will advance.

7. It is advised that the electricity grid be improved. Government officials from the public and private sectors should work together to provide and maintain technology in schools that educate teachers. At all educational levels, particularly in the B. Ed., computer and living skills instruction ought to be required. Pre-service teachers will be able to pick up these skills during their training time due to this.

8. Sufficient funding must be raised for the improvement of Computer skills. At the central, regional, and municipal levels of teacher education institutions, trainees' self-esteem and instructing proficiency must be evaluated.

5.11. Suggestions For Further Research

The significance of life skills, social intelligence, and digital abilities has received considerable discussion. Despite the abundance of studies, only one research project of Mizoram has been carried out in addition to this one. On the following subjects, there are still lots of study voids:

1. Although the current study solely focused on aspiring B.Ed teachers, similar research could be done on aspiring D.T.Ed, B.Sc., B.Ed, and M.Ed. teachers as well.

2. The effects of life skills training on the social skills of pre-service and in-service student teachers in Mizoram can be further investigated through an experimental study.

3. A study of a systematic review on different age-specific life skills education: Prospects and Opportunities.

4. Studies on teaching competency, self-esteem, and computer abilities may be expanded to other educational levels. Examples include the intermediate and higher secondary levels at the local and state levels.

5. The focus of the current research was strictly on gender. However, additional study can be done on other demographic variables like location, wealth, parental schooling, profession, religion, and race.

6. A cross sectional study on the development of life skills programme and its impact among the teachers, parents, stakeholders, policy makers, administrators can also be taken up for further study.

7. Perception towards life skills and its impact on the lifestyle of Mizo adolescents can be taken or further researched.

8. ICT infrastructure in teacher education institutions of Mizoram: A study on its access and usage.

9. Impact of digital skills on teaching learning and academic performance of student teachers in Mizoram.

10. Effects of life skills on social intelligence and ICT competencies of student teachers with regard to their gender can be taken up on a larger scale covering more states.

11. Use of ICT by teacher educators in DIETs, CTEs and IASEs: An analytical study.

12. A study on the effectiveness of Media and ICT integration in schools and colleges.

13. Relationship between spiritual intelligence and socio-emotional intelligence among pre-service and in-service student teachers of Mizoram.

14. Social intelligence and the biology of leadership: A randomized study of student teachers of Mizoram.

15. Future studies for example, social intelligence and its effectiveness on Leadership Building among student teachers.

16. Are life skills a mediator of Social Intelligence? A critical review and in-depth exploration.

17. To investigate in larger samples of different age groups whether Life Skills Education is a key to success.

18. To further explore qualitatively the effect of life skills on the problem solving ability and decision making skills.

19. To explore ways of promoting healthy lifestyle and life orientation through life skills among adolescents.

20. A study of social intelligence and decoding skills in non verbal communication

21. A multitrait-multimethod study of academic and social intelligence in teacher trainees

22. An overview of relevance and limitations of ICT in education.

23. Impact of Covid-19 on social intelligence and mental health: A critical review.

5.12. Conclusion

The present study aimed to find out the effect of life skills on social intelligence and ICT competencies of student teachers of Mizoram. The linear regression analysis showed that life skills positively affect social intelligence but life skills do not affect ICT competencies. Acquiring different life skills culminate in a reservoir of knowledge on how to handle daily experiences in a methodological manner inside and outside educational institutions. The productivity and success of students are greatly dependent on how much the educator has adequate life skills, social intelligence and ICT competencies. The teachers are efficient and productive when they are well equipped with problem solving skill, critical thinking skill, social and interpersonal relationship skills, coping with stress and emotions, maximum utilization of modern technology, practical and good communication skills. The present study found that student teachers of Mizoram had average level of life skills, above average level of social intelligence and average level of ICT competencies. The probable reason might be that B.Ed. curriculum has been designed, modified and revised over years, at regular intervals with sole aim and objective of developing effective teaching skills at the fullest among the student-teachers and ICT was incorporate in the B. Ed syllabus. The people living of Mizoram were very closely knit society and led a close community life where an individual has an ample of opportunities to develop effective communication skills, interpersonal relationship, sympathy, empathy, cooperation and collaboration, assertiveness and problem solving skills. The present study also revealed that there was no significant difference between male and female student teachers of Mizoram in their level of life skills and social intelligence. The possible reason might be because male and female students are given equal opportunity to learn and to grow side by side in the institutions; male and female co-operate, work together and mingle responsibly with one another. Both men and women had equitable access to opportunities in community, in social pursuits, and in the workplace. Everyday living depends on information and communication technology, and the educational system is continuing to emphasise this. The current research also found that the ICT proficiency levels of student teachers of Mizoram were ordinary, with no appreciable differences between male and female student-teachers in this regard.

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SUMMARY

Developing our capacity for what is typically referred to as "life skills" includes learning how to think critically, solve problems, be self-aware, manage stress, make decisions, interact with others, control our emotions, or even just manage stress and emotions. People may convert their knowledge, attitudes, and beliefs into useful talents and action (what to do and how to do it) through the application of life skills. Life skills are the aptitudes for flexible and constructive behaviour that enable people to successfully handle the demands and barriers of daily life, according to the World Health Organisation (1999). No matter if you're a student or a teacher, having life skills is essential because they help us develop our creativity, enable us to succeed where we can, increase our resilience and problem-solving skills in areas where we may be limited, and get us ready for a variety of social situations that would otherwise be very difficult. The development of various life skills leads to a body of information about how to approach everyday situations both within and outside of educational institutions in a methodical way.

In order to live a fulfilling life, people ought to be intelligent in general and socially intelligent in particular. Only social intelligence holds the key to solving this issue; high I.Q levels alone are insufficient to make an individual ideal for society. It aids people who find it difficult to adapt and adjust in social settings. Thorndike (1920) defined social intelligence as the capacity to comprehend people and behave sensibly in interpersonal interactions. Social intelligence is a feature of a person's mental capacity that enables social adaption. To develop an ideal and productive work environment, social intelligence is necessary for developing the abilities of effective verbal and nonverbal communication, teamwork, interpersonal relationships, assertiveness, empathy, compassion, and management skills.

Having excellent social skills is very essential and effective for carrying out the duty and responsibilities of a teacher. Social intelligence is crucial for teachers to connect with students in an efficient manner and to comprehend pupils in the classroom, in along with their social environment.

ICT is the fusion of computers and the telecommunications. Computers enable people to work creatively but they are limited by what they can access. Adding a

communications channel, such as the internet or other information services, significantly extends the capability of the computer. It can also become a means of obtaining education, information and working creatively with others irrespective of geographical barriers (Pathak & Chaudhury, 2012).

According to Yuen et al. (2005), ICT in education refers to any information technology that focuses on the capture, storage, modification, management, transmission, or receipt of data needed for educational purposes. The potential for teaching and learning is virtually limitless thanks to the use of ICT by educators and students alike. Communication is the sharing of thoughts, feelings, experiences, and information between two or more people. Technology is crucial in the conversion of data into information, knowledge, and wisdom (Kozma, 2005). Teachers who are proficient in problem-solving techniques, critical thinking skills, interpersonal and social relationships, managerial skills, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication are efficient and effective in the teaching profession.

Teachers who lack social intelligence, life skills, and ICT literacy may feel unqualified for their position, anxious, and unable to handle difficult circumstances or build a professional network. Due to pupils' weak ICT or digital capabilities and lack of core life skills, teachers, students, and whole process of learning and institution may encounter a variety of challenges.Therefore, in order to be regarded as professionals, teachers must adopt innovative attitudes, be flexible in their tactics, and keep up with changes in their domains of expertise. They should also be able to understand the worth of human potential, identify the various demands of the students, and provide an environment that is favourable to learning. The ability of a teacher to use ICT, social intelligence, and life skills will have a significant influence on how successful and productive his or her pupils are. Teachers who are proficient in problem-solving techniques, critical thinking skills, interpersonal and social relationships, managerial skills, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication are efficient and effective in the teaching profession.

Without teachers being entirely comfortable with new techniques of integrating ICT in the classroom, providing students with access to computers and

instructional content would not have much of an influence on the teaching and learning process. Future educators, including student teachers, must stay current with cutting-edge technology in order to be proficient in it. Through teacher preparation, pre-service teachers may learn how to become effective and efficient educators. Thus, it is essential to impart knowledge, help people learn and improve life skills, and make the best use possible of the institutions' IT resources during their pre-service training course. It has been observed that the B.Ed. curriculum has been designed, modified, and revised over the years at regular intervals with the sole aim and objective of fully fostering excellent teaching skills among the student-teachers. Life skills empower the young teacher trainees to act responsibly, take initiative, and take control. Life skills training helped in improving self-esteem, self-efficacy, communication skills, and adjustment for these student-teachers (Mishal, 2016). ICT isn't merely seen as a supplement to or a replacement for traditional educational strategies. ICT is viewed as a crucial tool to promote innovative teaching and learning methodologies.

Rationale of the study

In order to manage students and class room environment successfully, teachers must possess a variety of skills. These include interpersonal relationship skills, effective communication, conflict resolution, coping with stress and emotion, cooperation skills, and empathy. This leads to enhanced student engagement and learning. Teachers are efficient and effective in the teaching profession when they are skilled in problem-solving methods, critical thinking abilities, interpersonal and social relationships, managerial abilities, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication methods.ICT in education enhanced teaching and learning activities by allowing the learners to learn from experts across the world besides classroom lectures, ICT allows for new ways of learning beyond traditional classroom lectures for students and teachers. With numerous unusual occurrences occurring in our lives, e-learning is becoming increasingly prevalent. As a consequence, educational institutions are now given greater opportunities to make sure that students have access to curriculum materials outside of the classroom as well as at home and

even in hospitals. Students with special needs are no longer at a disadvantage as they have access to essential material and special ICT tools can be used by special students for their own educational needs. This is proof that these advancements are beneficial and are now considered an essential part of our lives. This study has been undertaken to find out the level of life skills, social intelligence and ICT competencies of student teachers in Mizoram.

In the 21st century where education of women has taken on an increasingly significant role, it is important to find out whether there is any difference in the level of life skills, social intelligence and ICT competencies. Although most of the studies reviewed have highlighted that there is no significant difference in the level of life skills, social intelligence and ICT competencies between male and female students, it is necessary to prove or disprove this in societies like Mizo society where women education have been a backseat for so long. Thus, a research of this kind is much needed to shed light on this matter.

In the areas of life skills and social intelligence, life skills and emotional intelligence, life skills and achievement motivation, social intelligence and emotional intelligence, ICT and teaching methodology, and ICT and education, it has been observed that many researchers have conducted research using descriptive and experimental methods. Numerous research have been conducted on ICT, social intelligence, and life skills. Despite this, there remains a study deficit on how life skills affect social intelligence and ICT competencies. Therefore, it is crucial to acquire accurate data on this subject in order to both confirm our presumptions about how life skills affect social intelligence and ICT competences as well as to assist other studies who may benefit greatly from having access to such data. The results from this study will, it is anticipated, offer further inputs to higher education institutions regarding the development and implementation of pre-service and in-service teacher training programs.

With reference to the above facts, the following research questions arise:

8. What is the effect of life skills on social intelligence of student teachers?
9. What is the effect of life skills on ICT competencies of student teachers?
10. Is there any significant difference between male and female student teachers in their level of life skills?

11. Is there any significant difference between male and female student teachers in their level of social intelligence?
12. Is there any significant difference between male and female student teachers in their level of ICT competencies?
13. What is the status of ICT infrastructure in teacher training institutes of Mizoram?
14. What is the level of use of the available ICT infrastructure by the student-teachers?

Statement of the problem

In the light of the much needed information with regard to the effects of life skills on social intelligence and ICT, the problem of the study has been stated as:

"**Effect of Life Skills on Social Intelligence and ICT Competencies of Student Teachers of Mizoram**"

Operational definition of the term used

The terms used in the title of the study carry some specific meanings. The operational definitions of these terms are given as follows:-

Life Skills: Life skills are any skills acquired through learning, direct or indirect life experiences that enable individuals to effectively handle issues and problems commonly encountered in our daily life. In the present study, the term Life Skillsreferred to the score of the sample students in Life Skills Scale developed by Raina Tiwari

Social Intelligence: Social intelligence refers to an ability to get along with others and also winning their co-operations. For the present study, social intelligence is represented by the score which is obtained from the Social Intelligence Scale developed by N. K. Chadha and Usha Ganesan

ICT Competencies:ICT competencies are a competence to use Information Communication and Technology in particular domains. For the present study, ICT

competencies referred to the score of the sample students in ICT competencies developed by the investigator.

Student Teachers:Student teachers are those who are learning under the supervision of a certified teacher in order to qualify for a degree in education. For the present study student teachers referred to all the B. Ed students of Mizoram

Gender: For the present study gender refers to the male and female student teachers.

Objectives of the study

1. To find out the level of life skills of student teachers of Mizoram.
2. To find out the level of social intelligence of student teachers of Mizoram.
3. To find out the level of ICT competencies of student teachers of Mizoram.
4. To compare the level of life skills of student teachers of Mizoram with reference to their gender.
5. To compare the level of social intelligence of student teachers of Mizoram with reference to their gender.
6. To compare the level of ICT competencies level of student teachers of Mizoram with reference to their gender.
7. To find out the effect of life skills on social intelligence of student teachers of Mizoram.
8. To find out the effect of life skills on ICT competencies of student teachers of Mizoram.

Hypotheses

The following hypotheses are framed in relation to the identified objectives:

1. There is no significant difference in the level of life skills of student teachers of Mizoram with reference to their gender.
2. There is no significant difference in the level of social intelligence of student teachers of Mizoram with reference to their gender.
3. There is no significant difference in the level of ICT competencies of student teachers of Mizoram with reference to their gender.

4. There is no significant effect of life skill on social intelligence of student teachers of Mizoram.
5. There is no significant effect of life skill on ICT of student teachers of Mizoram.

Review of related literature

A total of 127 reviews have been incorporated in the study. There were 46 studies related to life skills, 40 studies related to social intelligence and 41 studies related to ICT competencies. The review period range from 1980 to 2022.

Methodology

Research is a systematic investigation into a phenomenon to establish relationship between variables in order to arrive at a valid conclusion. It may also be defined as 'the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles or theories, resulting in prediction and possibly ultimate control of events' (Best & Kahn, 2004). Methodology is the science of methods. Divergent methods which are used by the researchers during the course of studying the research problem can be termed as research methodology. This chapter's primary goal is to explain the methodological elements, including study design, population and sample, data gathering instruments, tool administration, and data collection. Research design is a plan outlining the steps the researcher will take, starting with writing goals, hypotheses, and their operational consequences, and ending with findings from data analysis. Given that it outlines the complete research process, a research plan aids the researcher in discovering solutions to the research problem and other issues raised by the study. Additionally, a research design instructs us how to gather data, what observations should be made, how to make them, and how to evaluate the data.

The design informs the investigator's choice of statistical methods for analysis. In experimental study, design also provides guidance for controlling specific factors. The decision about the method depends upon the nature of the problem selected for the study and the kind of data, necessary for the fulfilment of the objectives of the study. The present study is descriptive in nature. A descriptive study describes and interprets the present status of what is being studied, recording, describing, analyzing

and interpreting the conditions that already exist. Descriptive study describes and interprets 'what is'. 'It is concerned with condition or relationships that exist, opinions that are held, processes that are going on, the effects that are evident, or trends that are developing' (Best & Khan, 2004).As the present research was to describe and interpret the effect of life skills on social intelligence and ICT competency of student teachers of Mizoram. Here the purpose is concerned about 'what is' the effects of independent variable upon dependent variable to see if they support emerging generalisations is another focus of the research.

Population and sample

For the present study all student teachers pursuing B. Ed course during the academic years 2020- 2022 in Mizoram constituted the population of the study since the present study is concerned with the study of the effect of life skills on social intelligence and ICT competency of student teachers of Mizoram. The sample consists of 451 student teachers in Mizoram using probability proportional to size sampling procedure. Probability proportion to size sampling is a sampling procedure under which the probability of a unit being selected is proportional to the size of the ultimate unit, giving larger clusters a greater probability of selection and smaller clusters a lower probability, in order to ensure that all units (example. people/organisation) in the population have the same probability of selection irrespective of the size of their cluster. Probability proportion to size sampling procedure is useful when the sampling units vary considerably in size because it assures that those in larger sites have the same probability of getting into the sample as those in smaller sites, and vice versa.

Most of the educational phenomena consist of a large number of units. It is not possible to contact each and every element of the population. The investigator has to select some individuals who would represent the whole population. The representative proportion of the whole population is called as a sample. 'A sample is a small proportion of the population that is selected for observation and analysis. By observing the characteristics of the sample, one can make certain inference about the characteristics of the population from which it was drawn.' (Best & Kahn, 2010). Samples were taken from District Institute for Education and Training, Aizawl, Institute of Advanced Studies in Education, Department of Education of Mizoram

University and District Institute for Education and Training, Lunglei. The details of the actual number of student teachers are shown in Table 1 and Table 2.

Table 1

Population of Student Teachers of Mizoram

	Population		**Total**
	Male	**Female**	
IASE	62	186	248
MZU	118	62	200
DIET Aizawl	59	41	100
DIET Lunglei	67	33	100
Total	648*		

**student-teachers of both 2nd and 4th semester*

Table 2

Sample of Student Teachers of Mizoram: Gender wise

Institutions	Gender		Total
	Male	Female	
IASE	86	44	130
MZU	92	72	164
DIET Aizawl	50	39	89
DIET Lunglei	48	20	68
Total	276	175	451*

**student-teachers of both 2nd and 4th semeste*

Tools used

A research tool is an instrument that is used for data gathering and has been shown to be reliable and accurate. The regularity of the tool or procedural performance is its level of dependability. The ability of data collection method or instrument to gauge what is intended to quantify is known as validity. Keeping in

view the objectives of the present study the following were the tools used by the researcher:

4. Life Skills Scale (2013-2014) standardized by Raina Tiwari, published by Ascending Psychology Center, 1173, Sneh Nagar, Gada Road, Jabalpur (MP) 482002.
5. Social Intelligence Scale (2013) standardized by N. K. Chadha and Usha Ganesan, published by National Psychological Corporation, Agra 1971.
6. Scale for assessment of the competencies of student teachers on ICT wasdeveloped by the researcher.

Collection of data

All of the tools applied in this investigation were self-administering scales. The original sources from which the data were gathered. Except at DIET Lunglei, where data were gathered via a Googleform facade owing to the covid-19 pandemic, the investigator personally visited the institutes chosen for the research. After getting approval from the institution's administrators, the scales were given to the student instructors. During the hour of class, the institution's professors assisted in administering the scales. The goal of the study and the fact that the information gathered would be kept private and utilised solely for research were both highlighted throughout the administration of the scale. There was a considerable of priority placed on the fact that there is no right or incorrect response to any of the scale's claims, and the respondents were asked to provide honest and accurate responses to all of the items (without missing any item or statement). The Life Skills Scale, Social Intelligence Scale, and ICT Competency Scale were distributed once the student instructors received the relevant guidelines and instructions about the scales. The entire process took an hour and a half.

The data collected from the student teachers were scrutinized and tabulated after scoring the responses on all of the tests using the test scoring procedures given in the respective manuals. Each respondent was assigned a serial number and their details regarding gender and the scores of the three tests were entered in the tabulation sheet and these were subjected to statistical treatment. For this, the following statistical tests were employed.

Mode of analysis

Keeping in view the nature of the data and objectives of the study, the investigator employed the following techniques for analyzing the data.

Descriptive statistics were used such as:

1. Measures of central tendency of mean. Measures of central tendency are the most basic and, often, the most informative description of a population's characteristics. They describe the average member of the population of interest.
2. Measures of dispersion of standard deviation which provides information about the spread of a variable's values.
3. Test of significance for mean differences. The t-test was used to find out the significant difference between male and female student teachers
3. Correlation to find out how the independent variable is related to the dependent variable. Measures of association indicate whether two variables are related. Pearson product moment correlation was used to find out the strength of the relationship between the independent variable (life skills) and dependent variables (social intelligence and ICT competencies).

Inferential statistics such as linear regression analysis was used to examine the influence or effect of one or more independent variable on dependent variable. To predict the effect of independent variable (life skills) on dependent variables (social intelligence and ICT competencies) linear regression analysis was adopted.

Major findings of the study

Objective No. 1: Level of life skills of student teachers of Mizoram

The findings of the present study revealed that out of 451 student teachers, 216 (47.89%) had high level of life skills, 190 (42.13%) of student teachers had average life skills and 45 (9.98%) of student teachers had low level of life skills. The mean score and standard deviation of the level of life skills of 451 student teachers of Mizoram were found to be 26.95 and 5.54 respectively. Therefore, it may be inferred that student teachers of Mizoram had average level of life skills.

Discussion:

The findings of the present study show that student teachers of Mizoram had average level of life skills. Similar research studies across India were also taken up by some researchers and found that the level of life skills of B. Ed students had average level of life skills (Sandhu 2014, Sridevi & Amuthavalli 2019**,** and Das 2019). In contrast to the results of the present research, Vijayalakshmi (2019) in Tamil Nadu discovered that B.Ed. teacher trainees had a very high degree of life skills. A research in Haryana conducted by Sandhu (2014) revealed that 24% of student teachers had low level life skills, 4% of student teachers had low level life skills, and 72% of student teachers had medium level life skills. In Karnataka, Dayaprasad (2019) discovered that 49.4% of B.Ed. teacher candidates had poor life skills. 13.6% had excellent levels of life abilities, and 37.0% had moderate level of life skills.

Objectives No. 2: Level of social intelligence of student teachers of Mizoram

The results of the present research revealed that student teachers of Mizoram had a mean score and standard deviation of 102.79 and 9.04, respectively, for social intelligence. Thus, it can be concluded that Mizoram's student-teachers had above-average levels of social intelligence. Out of 451 student teachers, 9(1.99%) of student teachers were having extremely high level of social intelligence, 22(4.88%) of student teachers were having high level of social intelligence, 128(28.38%) of student teachers were having above average level of social intelligence, 161(35.69%) of student teachers were having average level of social intelligence, 80 (17.74%) of student teachers were having below average level of social intelligence, 35 (7.76%) of student teachers had low level of social intelligence and 16(3.55%) student teachers had extremely low level of social intelligence.

Discussion:

The findings of the present study revealed that student teachers of Mizoram had above average level of social intelligence. The finding of the present study conducted of Mizoram can be further assimilated and incorporated with the finding of the similar study conducted across India and aboard, the results indicated that B. Ed students were having above average and average level of social intelligence (Parveen Rani 2018, Kharluni&Erigala 2018,Uygun et al. 2020, Jasleen et al.2021). Jeloudar

and Yunus (2011) in Malaysia found that secondary school teachers had average level of social intelligence.Jeloudar et al. (2012) found that school teachers from India, Malaysia and China had average level of social intelligence. Kharluni and Erigala (2018) in Meghalaya found that 1.4% of secondary school students had very high level of social intelligence, 6.9% had high level of social intelligence, 57.4% had average level of social intelligence, 26.9% had low level of social intelligence and 7.4% had very low level of social intelligence. Anbalagan and Kasirajan (2020) in Tamil Nadu found that 15.7% of student teachers had low level of social intelligence, 69% of student teachers had moderate level of social intelligence and 15.3% of student teachers had high level of social intelligence.

Objective No. 3: Level of ICT competencies of student teachers of Mizoram

A Likert type ICT competencies scale has been constructed for the present study. Reliability was measured by using cronbach's alpha and spearman brown prophecy coefficient. The internal consistency measure cronbach's alpha obtained was found to be 0.881 and thus it was interpreted that the test was highly reliable. Similarly spearman brown prophecy coefficient and the gultman split half coefficient value were 0.9 and 0.887 respectively. Content validity was established by giving the scale to several experts in the field of ICT with a request to rate the items and provide feedback. It was found that the scale was sufficiently valid based on their comments and responses.

According to the results of the present study, student-teachers of Mizoram had an ICT competency score that was 58.45 on average and 11.44 on a standard deviation scale. Thus, it can be said that Mizoram's student-teachers had an average level of ICT proficiency. 148 (32.81%) of the 451 student-teachers had high level of ICT proficiency. Out of 451 student teachers, 292 (64.74%) had average level of ICT competencies, and 11 (2.4%) had low level. Thus, the finding indicates that more than half of the student teachers had average level with regard to ICT competency.

Discussions:

When ICT Scale developed by the investigator was administered to 451 student teachers of Mizoram, the findings of the present study found that those student teachers of Mizoram were found to be having average level of ICT competencies.

Similar study conducted by Vasilka et al. (2015) in Macedonia found that 25%, one-fourth of the teachers in primary schools had below basic ICT competency, 17% had basic knowledge and skills to operate a computer, and more than half, 58 had proficient level of ICT competencies.Gupta (2017) in Noida found that 53.3% of B.Ed. trainees were having below average level of ICT competencies, 46.6% were found to be having above average level of ICT competencies.

Objective No. 4: Levels of life skills of student teachers of Mizoram with reference to their gender

According to the findings of this study, male student teachers had a mean score of 27.29 and a standard deviation of 5.59 in terms of their degree of life skills. Comparable results were obtained for female student teachers, with mean scores and standard deviations of 26.73 and 5.49, respectively. Therefore, it may be inferred that male student teachers and female student teachers had average level of life skills. There was only a slight difference on their mean scores and the obtained difference may be attributed to chance factor. Out of 145 male student teachers, 87 (49.71%) were having high level of life skills, 69(39.43%) of male student teachers were having average level of life skills and only 19(10.86%) of male student teachers were having low level of life skills. Out of 276 female student teachers, 129(47.44%) female student teachers were having high level of life skills, 121(43.84%) of female student teachers were having average level of life skills and 26(9.4%) of female student teachers were having low level of life skills.

An inferential statistic like the t-test was used to determine whether there were any appreciable disparities in the level of life skills between male and female student teachers in Mizoram. The t-test result revealed that there was no significant difference in the levels of life skills between male and female student teachers in Mizoram. A minor differential favouring male student-teachers was discovered when their mean scores were taken into account, although it was not statistically significant.

Discussions:

There was no discernible difference between male and female student-teachers of Mizoram in terms of their level of life skills. A small difference favouring male

student-teachers was discovered when their mean scores were taken into account, but it was not statistically significant. There are no discernible differences between male and female student instructors' levels of life skills, according to the results of this research, which are consistent with those of other studies conducted in India and abroad (Sarla et. al 2022, George 2021, Alaka 2019, Das 2019,Vijayalakshmi 2019, Kharluni&Erigala2018, Vijayarani& Geetha 2017, Sandhu 2014,Asmitaben 2012**,** Garg 2011,). In contrast to the findings of the present study, some studies found that male were having higher level of life skills as compared to female (Ajitha2007, King 1999. Contrasting to the findings of Ajitha (2007), King (1999), Dayaprasad (2019) female were having higher level of life skills (Sridevi & Amuthavalli 2019, Sridevi 2019).

Objective No. 5: Level of social intelligence of student teachers of Mizoram with reference to their gender.

The present study found that the female student-teachers had a mean social intelligence score of 103.41 and a standard deviation of 8.57. The mean scores and standard deviation of male student teachers were found to be 101.81 and 9.69, respectively. Therefore, it can be said that both male and female student teachers had average levels of social intelligence. However, a comparison of their mean scores showed that the mean score of male student teachers were slightly higher than those of female student teachers, though this difference was not statistically significant. Out of 175 male student teachers, 3(1.71%) were having extremely high and 6 (3.43%) of student teachers had high level of social intelligence. 48 (27.43%) of male student teachers were having average level of social intelligence, 58 (33.14%) of male student teachers were having above average level of social intelligence and 32 (18.29%) of male student teachers were having below average level of social intelligence. 22(12.57%) of male student teachers were having low level of social intelligence and 6(3.43%) of male student teachers were having extremely low level of social intelligence. Out of 276 female student teachers, 6(2.17%) were having extremely high level of social intelligence, 16(5.79%) of student teachers had high level of social intelligence, One-fourth of female student teachers, 70 (25.36%) were having above average level of social intelligence, 113(40.94%) of female student teachers were having average level of social intelligence and 48(17.39%) of female student teachers were having below average level of social intelligence. 13(4.71%) of female

student teachers were having low level of social intelligence and only 10(3.62%) of female student teachers were having extremely low level of social intelligence.

In order to find out the significant differences between male and student teachers of Mizoram on their level of social intelligence, inferential statistic such as t-test was used and it was found that there was no significant difference in the levels of social intelligence between male and female student teachers of Mizoram. Considering their mean scores, a slight difference was found favouring male student teachers but not statistically significant. An attempt was made to show the significant difference between male and female student teachers on the eight dimensions of social intelligence scale. The social intelligence scale was divided into five parts; the first part contains 36 questions to evaluate patience (8 questions), co-operativeness (11 questions), confidence (8 questions) and sensitivity (9 questions). The second part contains 3 questions to check recognition of social environment. The third part contains 7 questions to evaluate tactfulness. The fourth part contains 8 questions to evaluate sense of humour. The fifth part contains 12 pictures to check memory. Results of the detailed analysis showed that there was no significant difference between male and female student teachers on their level of patience, co-operativeness, confidence and sensitivity. The t-test result showed that there was no significant difference between male and female student teachers on their level of recognition of social environment. The t-value for the significant difference between male and female student teachers on their level of tactfulness revealed that there was no significant difference between male and female student teachers on their level of tactfulness. The t-value for the significant difference between male and female student teachers on their sense of humour revealed that there was significant difference between male and female student teachers on their sense of humour, female student teachers showed higher level in their sense of humour as compared to the male student teachers. The t-value for the significant difference between male and female student teachers on their level of memory revealed that there was no significant difference between male and female student teachers on their level of memory.

Discussions:

No significant difference was observed in the levels of social intelligence between male and female student teachers in Mizoram. The finding of the present study conducted of Mizoram can be further assimilated with the findings conducted

by some studies which showed no significant differences between male and female student teachers in their level of social intelligence (Barbera et al. 2003, Gnanadevan 2007, Dixit & Kaur 2015**,** Rani 2016, Tiakala2016, Arthi&Tamilselvi 2016**,** Rani &Shaili 2017**,** Kharluni&Erigala 2018**,** Bhattacharyya &Sanghamitra 2018**,** Asgharet al. 2019, Jasleen et al. 2021, Kaur et al. 2021).Notwithstanding the findings of the present study, Uygun et al. (2020) in Turkey found that female pre-service teachers had higher level of social intelligence as compare to male pre-service teachers. Kamil and Bilal (2020) in Turkey found that the level of social intelligence of female pre-service social science teachers was higher as compared to male pre-service social science teachers.

A study conducted by Arthi and Tamilselvi (2016) in Tamil Nadu found that there was no significant difference between male and female B. Ed student teachers in their level of social intelligence. Detailed analysis of the eight dimensions of social intelligence revealed that there was no significant difference between male and female B. Ed student teachers in co-operativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humour and memory. The findings of their study also found that there was significant difference between male and female B. Ed student teachers in the patience dimension yet female student teachers had higher level of patience as compared to male B. Ed student teachers. A study conducted by Kaur et. al (2021) in Punjab found that there was no significant differences between male and female teacher trainees in their level of social intelligence. Detailed analysis of the eight dimensions of social intelligence revealed that there were no significant differences between male and female teacher trainees in patience, confidence, sensitivity and tactfulness. The findings of their study revealed that there were significant difference between male and female teacher trainees in cooperativeness, recognition of social environment, sense of humour and memory; male teacher trainees had higher level of memory, sense of humour and recognition of social environment as compared to female teacher trainees. The result of their study also revealed that female teacher trainees showed higher level in the dimension of cooperativeness.

Objective No. 6: ICT competency levels of student teachers of Mizoram with reference to their gender.

The findings of the present study revealed that the mean score and standard deviation of the level of ICT competencies of male student teachers were found to be 59.56 and 12.53 respectively. Similarly, the mean score and standard deviation of the level of ICT competencies of female student teachers were found to be 57.75 and 10.66 respectively. Therefore, it may be inferred that male and female student teachers have average level of ICT competencies. Out of 175 male student teachers half of the male student teachers, 91(52%), were having average level of ICT competencies, 77(44%) of male student teachers were having high level of ICT competencies and 7(4%) of male student teachers were having low level of ICT competencies. Out of 276 female student teachers, 201(72.83%) were having average level of ICT competencies, 66 (23.91%) were having high level of ICT competencies and only 4(1.45%) were having low level of ICT competencies.

A hypothesis was formulated and an inferential statistic like the t-test was used to determine whether there were any significant variations in the levels of ICT capabilities between male and female B. Ed students of Mizoram. It was found that there were no such disparities. Male student teachers had higher mean scores than female student teachers, which indicate that they have higher levels of ICT competence than female student teachers, albeit this difference is not statistically significant. Studying the stark differences between male and female student instructors on the three ICT aspects was attempted. The ICT scale was divided into three dimensions to evaluate the Basic (9 items), Intermediate (6 items) and advanced (9 items) ICT competency. The significant difference between male and female student teachers on their level of basic ICT Competencies was significant at 0.05 levels. A comparison of the mean scores in basic ICT competencies of male and female student teachers revealed that the mean score of male student teachers was higher as compared to the mean score of female student teachers. The significant difference between male and female student teachers on their level of intermediate ICT Competencies was significant at 0.05 levels. A comparison of their mean scores revealed that male student teachers had higher mean score as compared to female student teachers. There was no significant difference between male and female student teachers on their level of advanced ICT competency.

Discussions:

No significant difference was found in the levels of ICT competencies among male and female student teachers of Mizoram. Comparison of their mean scores showed that male student teachers were having higher mean score than female student teachers which means male student teachers have higher level of ICT competencies than female student teachers but not statistically significant. Detailed analysis of the three dimensions of ICT competencies between male and female student teachers showed that there was significant difference between male and female student teachers in their level of basic and intermediate ICT competencies, male student teachers had higher basic and intermediate ICT competencies as compared to female student teachers but not statistically significant. The result of the gender comparison on advanced ICT competencies showed that there was no significant difference between male and female student teachers on their level of advanced ICT competencies.

Other researchers also looked at studies on the ICT proficiency of teachers and teacher trainees, and they discovered no appreciable differences between male and female B. Ed student teachers (Cavas et al. 2009, Gulkane 2011, Yusuf & Balogun 2011, Samson 2013, Deivam 2016, Durgadevi& Ahamed 2017, Tondeura 2018, Lin et al. 2022).The results of the current study, which was conducted in Mizoram, can be correlated with those of the study, which was conducted in Nigeria; they showed that there was no discernible difference in male and female student-teachers' use of ICT (Yusuf & Balogun 2011).Another study conducted in Malaysia indicated that there were no significant gender differences in terms of word processing, presentation, spreadsheet, World Wide Web, email, database, social networking and utility competency among the pre university students (Teck & Lai 2011).

Objective No. 7: Effect of life skills on social intelligence of student teachers of Mizoram.

It was hypothesized that high level of life skills will positively predict high social intelligence. The data collected were analyzed using Pearson r correlation and linear regression analysis was used to test the ‘Ho. 5: There is no significant effect of life skills on social intelligence of student teachers of Mizoram.’ The result of

correlation analysis revealed that the correlation was 0.177 which was positive and found significant at 0.01 levels which indicate significant relationship between life skill and social intelligence. In addition, the result of linear regression analysis on the impact of life skills on social intelligence showed that the estimated regression coefficient of life skill (i.e. 0.287) was found significant at 0.01 level, while the F-statistic of the ANOVA was also highly significant. Thus, it may be concluded that the life skills of the student teachers of Mizoram have positive effect on the social intelligence.

Discussion:

The results of this study showed that high levels of social intelligence among student teachers of Mizoram were predicted by high levels of life skills; vice versa, as life skills levels rise, so do social intelligence levels. Several more studies highlight the consequences, influence, and connection between social intelligence and life skills. The same results can be subsumed with the study conducted in Bengaluru showed that there was a significant effect of life skill training on social intelligence among private school adolescents (Sowmyashree & Sreenivasa 2019). A study conducted in Iran showed that life skills training had a significant and positive impact on social skills in the experimental group, whereas there was no significant difference in the control group (Saiedeh et al. 2017). Another study conducted in Nagaland indicated social intelligence was significantly related with life skills (Tiakala 2016).

Objective No. 8: Effect of life skills on ICT competencies of student teachers of Mizoram.

It was hypothesized that high level of life skills will positively predict high ICT competencies**.** From the results of regression analysis, the regression coefficients are not significant. So, it may be concluded that life skill has no significant effect on the ICT competency, which justifies the study hypothesis 'Ho.6: There is no significant effect of life skills on ICT competencies of student teachers of Mizoram'. The regression analysis revealed that 03.1 percent of variance in life skills was accounted by social intelligence. The dependent variable (ICT competency) was regressed on predicting variable (life skills) to test the null hypothesis (Ho6). Life skills significantly does not predict the ICT competencies, and the calculated F

(1,450) = 14.54, $p < 0.001$, which indicates that the life skills do not play a significant role in the ICT competencies (b=.177, $p < 0.001$).

Discussion:

From the results of regression analysis on impact of life skills on ICT competencies, the regression coefficients are not significant which means if the level of life skills increases the level of ICT competencies level may or may not increase. The Pearson r correlation analysis showed relationship between life skills and ICT competencies to some extent. The findings of the present study corroborate to the finding by Dhawan (2012) in which the research results revealed that boys are found to prefer more of Executive and Scientific areas whereas girls were found to be more inclined towards Literary and Household areas. No significant interaction effect of ICT competencies and life skills was found on vocational preference of 11th class students and ICT competencies have significant influence on life skills of both boys and girls.

Educational implications

Teachers set an example for their pupils by modelling behaviour in the classroom and outside of the school. It is impossible to overstate the role and value of teachers in society. In the area of education or in a particular teaching-learning scenario, the teacher is the most important agent who disseminates information, sets the schedule, chooses reading materials, assumes the position of topic expert, assesses learning outcomes, and aids students in overcoming obstacles and personal issues. He establishes the bar and cultivates what is admirable. The social intelligence of the student teachers was shown to be significantly impacted by life skills in the current study, and these findings have implications for teachers, administrators, educationalists, and of course students. According to the current study, social intelligence and life skills are positively correlated, thus student instructors who have strong life skills will also have strong social intelligence. A high degree of life skills aids in one's ability to work effectively and efficiently as a teacher.It helps in reducing the antisocial activities, reduces the stress, helps in controlling the emotions and establishes good relationship between teacher and student for effective teaching-learning. Life skills education is an important subject which must be taught in our educational institutions especially in pre-service teacher education. Thus, there is a

direct need of integrating life skills in the curriculum of pre-service training institutions. In order to transact the curriculum successfully, educator must be trained continuously to develop the life skills in the student teachers properly. Successful integration of life skills can be achieved through subjective as well as practical tasks. Besides practice teaching, classroom discussion to provide opportunities for develop solving problems skills and to enable learners to have an in-depth understanding of the topic and develops skills, in listening, assertiveness, and empathy, group task to maximize students engagement and interactions to develop and learn cooperation, collaboration with others, and debatesto provide the chances to discuss issues in depth and creatively can be introduced to integrate life skills in teaching practice programme.

From the findings of the present study, majority of the student teachers of Mizoram had average level of life skills and social intelligence and there were no gender differences on their level of life skills and social intelligence of student teachers of Mizoram. The study also revealed that the level of life skills of student teacher of Mizoram has positive effect on the level of social intelligence of student teachers of Mizoram, which implies that student teachers who have high level of life skills will also have high level of social intelligence, if the level of life skills increases the level of social intelligence will increase and vice versa. These results will give immense help to students, teachers, educational administrators, stakeholders and college counsellors to identify the social problem of the students and provide them the adequate solution for their problem through life skills training and it is important for the teachers' educator to not only influence the student teachers academically, but also socially and morally. The findings of the present study emphasize the importance of life skill centred curriculum in teacher training institutions. So teachers must develop the interpersonal relationship skills, self-awareness, empathy, coping with stress, coping with emotion, critical thinking skills, creative thinking skills, problem-solving skills, and effective communication skills, to receive constructive feedback, to cooperate and collaborate with others, and also inculcate these skills within their training period.The curriculum, teaching designs and classroom environment of the teacher training institutions should be such that it inculcates the life skills and social skills of student teachers. The curriculum developer, curriculum coordinator need to delineate life skill development programmes and also integrate it as a part of pre-

service curriculum of Mizoram. Curriculum should be focused at enhancing the social intelligence, life skills and ICT competencies of the each student teacher.

The present study revealed that life skills have no significant effect on the ICT competencies of student teachers of Mizoram, which implies that an increase in the level of life skills will not predict increase in the competencies level of ICT of student teachers. The findings of the present study also revealed that majority of the student teachers of Mizoram had high and average level of ICT competencies; the probable reason might be that B.Ed. curriculum has been designed, modified and revised over the years at regular intervals with sole aim and objective of developing effective teaching skills at the fullest among the student-teachers and ICT was incorporated in the B. Ed syllabus. However, one needs to be updated and upgraded frequently with the latest software. To enhance education through ICT it requires clear and specific objective, targets and resources for achieving the purpose. Educational planners, curriculum developer, curriculum coordinator, educational administrators, academic directors, policy planners and concerned authorities must analyse the present state of the educational system, institutional arrangements and practices and identify hindrances relating to infrastructure, finance, curriculum and pedagogy and capacity building. Teachers must take into account the potentials of various ICT when they are implemented in various contexts, for various reasons, and their limitations within the nation. It is important to take into account the finest practices used by other states or nations for integrating and upgrading technology. Obsessively focused on meeting standards, teaching from scripted curriculum, and meeting test benchmarks would not prepare student teachers to acquire the necessary skills required to be a productive and efficient teacher unless intentional instruction was designed through the implementation of realistic life skills, social kills, and ICT lessons. Pre-service teacher curricula should be focused at enhancing the social intelligence, life skills, and ICT competencies of each student teacher.

Recommendations

On the basis of the present findings, the following recommendations are proposed:

9. It is recommended that NCTE in collaboration with NCERT and SCERTs should develop compulsory life skills training course for pre-service teacher

trainees so as to enhance communication skills, professional/career skills, interpersonal relationship skills, cooperation and collaboration, leadership skills and management skills, as life skills based education is the means to accredit the minds of the youth in demanding situations such as personal and interpersonal skills. Consequently, adoption of life skills is the only key to excellence. Life skills education involves active participation of the learner while teacher acts as a facilitator and mentor. Therefore, life skills education involves various activities such as oral presentations, delivering unscripted speeches, creative and critical thinking, team building exercises etc.Teachers training institutions should continue to encourage organizing programmes to facilitate communication, interpersonal communication and relationship skills, co-operate with others through classroom discussion, assigning student teachers into groups or pairing student teachers who have similar interests for project work and other collaborative activities to encourage teamwork in the classroom, seminar etc. When it comes to education and learning, the individual learner becomes the most important element for the success at every level.

10. Life skill-based education should have a proper position in the academic programme. It should not be viewed as an extracurricular activity or a kind of inactive moral instruction. The school needs to implement a learner-centric pedagogy and numerous learning chances. To create a school atmosphere that supports life-skills-based education, teachers should develop and incorporate life skills into their classroom practices. They should also work to surmount implementation challenges.

11. It is recommended that sufficient amount of multimedia-based teaching and web-based project works should be included in the teacher education curriculum. It is recommended that student teacher should have a project of preparing at least 15 lesson plans by integrating the various technologies. This will make it possible for pre-service teachers to acquire these competencies during their training period. In the present digital era, our classroom environment has changed from one way learning to a two-way learning process where both teachers and students actively participate. Our present education system has gradually become student centric. Children in the

present digital era are advanced learners and since education is based on child centric education, it is imperative for all teachers to get themselves prepared and to copewith different ICT tools so as to make the classroom teaching-learning interesting.

12. It is recommended that crash course especially in ICT application could be conducted to improve the attitude of B. Ed trainees, as not all student teachers who have content knowledge of ICT could be effective in practical. Experimenting with technology through hands-on experience can help develop student ICT skills, therefore, student teachers must try to make maximum utilization of the ICT facilities available in their institutions. There are so many options for edtech tools such as screencastify, wakelet, remind, google workspace (docs, slides, forms, lens, drawing), headspace, ever note, duolingo, dotstroming, booklet, splashlearnetcwhich a teacher can use in and out of the classroom for effective teaching and learning. Making use of technology in education creates an easy-to-manage learning environment where the delivery of information is so much smoother and the learning easier. Therefore, student teachers who are the future teachers must have a good digital skill by updating themselves with new technologies. Teachers require extensive, on-going exposure to ICTs to be able to evaluate and select the most appropriate resources. In the B. Ed syllabus ICT was incorporated but beyond theory student teachers must practice the skills they learnt theoretically and continue to use them, if we do not practice continuously we would not be able to keep up with the newest developments in the technology industry we may even forget how to do basic things. There are some resources for increasing digital skills to educate themselves at home such as websites with free online courses such as Common sense education, Techboomers, GCFLearn,org., DigitalLearn,org etc. Keeping up with current tech trends is important in maintaining digital skills over time, there are numerous websites such as DigitalTrends.com, Lifewire.com,Cnet.com, Thewirecutter.com and others which are useful and convenient to keep us up with the latest tech.
13. It is highly recommended that teachers training institutions should continue to encourage organizing programmes to facilitate communication, interpersonal communication and relationship skills, co-operate with others through

classroom discussions, assigning student teachers into groups or pairing-student teachers who have similar interests for project works and other collaborative activities to encourage teamwork, goal setting and responsibility in the classroom. Teachers can also carve out a time in their curriculum to directly teach the communication skills, interpersonal relationship skills, conflict resolution, empathy, co-operation skills to their student teachers. Research based programmes such as Second Step, provide teachers and institutions with explicit lessons for social development.

14. In order to promote interpersonal skills, verbal and nonverbal communication skills, sensitivity, teamwork and cooperation skills, it is advised that schools regularly arrange lectures and workshops for student instructors. Assuring that everyone has a chance to participate in discussion forums helps develop leadership abilities, interpersonal skills, problem-solving abilities, the ability to give and receive constructive criticism, the ability to read social cues, the ability to understand humour, the ability to actively listen, the ability to be assertive, the ability to deal effectively with conflict, and the ability to cooperate and collaborate. The more we try to engage and speak with others, the more we will learn about the knack of understanding and talking, and the more our interpersonal abilities, sensitivity, our ability to communicate effectively will advance.

15. It is advised that the electricity grid be improved, or photovoltaic power could be used instead. Government officials from the public and private sectors should work together to provide and maintain technology in schools that educate teachers. At all educational levels, particularly in the B. Ed., computer and living skills instruction ought to be required. Pre-service teachers will be able to pick up these skills during their training time due to this.

16. Sufficient funding must be raised for the improvement of Computer skills. At the central, regional, and municipal levels of teacher education institutions, trainees' self-esteem and instructing proficiency must be evaluated.

Suggestions for further research

The significance of life skills, social intelligence, and digital abilities has received considerable discussion. Despite the abundance of studies, only one research project of Mizoram has been carried out in addition to this one. On the following subjects, there are still lots of study voids:

1. The effects of life skills training on the social skills of Mizoram pre-service and in-service student teachers can be further investigated through an experimental study.

2. A study of a systematic review on different age-specific life skills education: Prospects and Opportunities.

3. Studies on teaching competency, self-esteem, and Computer abilities may be expanded to other educational levels. Examples include the intermediate and higher secondary levels at the local and state levels.

4. The focus of the current research was strictly on gender. However, additional study can be done on other demographic variables like location, wealth, parental schooling, profession, religion, and race.

5. A cross sectional study on the development of life skills programme and its impact among the teachers, parents, stakeholders, policy makers, administrators can also be taken up for further study.

6. Perception towards life skills and its impact on the lifestyle of Mizo adolescents can be taken or further research

7. ICT infrastructure in teacher education institutions of Mizoram: A study on its access and usage.

8. Impact of digital skills on teaching learning and academic performance of student teachers of Mizoram.

9. Effects of life skills on social intelligence and ICT competencies of student teachers with regard to their gender can be taken up on a larger scale covering more states.

10. Use of ICT by teacher educators in DIETs, CTEs and IASEs: An analytical study.

11. A study on the effectiveness of Media and ICT integration in schools and colleges.

13. Relationship between spiritual intelligence and socio-emotional intelligence among pre-service and in-service student teachers of Mizoram.

14. Social intelligence and the biology of leadership: A randomized study of student teachers of Mizoram.

15. Future studies for example, social intelligence and its effectiveness on Leadership Building among student teachers.

16. Are life skills a mediator of Social Intelligence? A critical review and in-depth exploration.

17. To investigate in larger samples of different age groups whether Life Skills Education is a key to success.

18. To further explore qualitatively the effect of life skills on the problem solving ability and decision making skills.

19. To explore ways of promoting healthy lifestyle and life orientation through life skills among adolescents.

20. A study of social intelligence and decoding skills in non verbal communication

21. A multi trait-multi method study of academic and social intelligence in teacher trainees

22. An overview of relevance and limitations of ICT in education.

23. Impact of Covid-19 on social intelligence and mental health: A critical review.

APPENDICES

APPENDIX I

LIFE SKILLS SCALE

Life Skills Scale
Dr. Raina Tiwari
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GENDER..... AGE.....

INSTITUTION/ORGANISATION.....CLASS.....

FATHER'S OCCUPATION.....FATHER'S

EDUCATION.....

MOTHER'S OCCUPATION.....MOTHER'S

EDUCATION.....

AVERAGE MONTHLY FAMILY INCOME.....

NUMBER OF FAMILY

MEMBERS.....SIBLINGS.....OTHERS.....

INSTRUCTIONS

In this scale, some statements related to your life are given. You have two options "Yes" and "No" for each fact. Kindly mark check box "Yes" if you agree with the fact or else select "No".

Score	Lifestyle Category

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Ascendind Psychology Center
1173, Sneh Nagar, Gada Road, Jabalpur (MP) 482002

1. I want to be an important person in the group

Yes ☐ No ☐

2. I set targets before starting my work

Yes ☐ No ☐

3. I prefer simple task due to fear of failure

Yes ☐ No ☐

4. I makes sure I complete my works

Yes ☐ No ☐

5. I consider myself weaker than others

Yes ☐ No ☐

6. I congratulate people when they are successful

Yes ☐ No ☐

7. I always entertain my team or group

Yes ☐ No ☐

8. I read biographies of successful persons

Yes ☐ No ☐

9. I encourage other to complete work

Yes ☐ No ☐

10. I get frustrated with my failure

Yes ☐ No ☐

11. I always try to be the best

Yes ☐ No ☐

12. I always reach on time in every program

Yes ☐ No ☐

13. I do not rest till I complete my work that I started

Yes ☐ No ☐

14. I give respect to my younger

Yes ☐ No ☐

15. I try to do everything better and better

Yes ☐ No ☐

16. I count myself among good people

Yes ☐ No ☐

17. I readily agree with the views of the group

Yes ☐ No ☐

18. I blame others for my failure

Yes ☐ No ☐

19. I stop my work when there is inconvenience

Yes ☐ No ☐

20. I let people know of their mistakes when they are not success or provide feedback

Yes ☐ No ☐

21. I listen carefully to others

Yes ☐ No ☐

22. I pay more attention to my failure as compare to success

Yes ☐ No ☐

23. I give others more opportunities to speak in conversation

Yes ☐ No ☐

24. I inspire others to achieve their goals

Yes ☐ No ☐

25. I conflict with the other's ideas or opinion

Yes ☐ No ☐

26. I try to please others

Yes ☐ No ☐

27. I feel lonely

Yes ☐ No ☐

28. It is my habit to do my work slowly rather than to do it fast

Yes ☐ No ☐

29. I get worried with small things

Yes ☐ No ☐

30. I sympathize with others in their hardship

Yes ☐ No ☐

31. I feel comfortable among strangers

Yes ☐ No ☐

32. I ignore others for my interest

Yes ☐ No ☐

33. I sympathize with the difficulty of others

Yes ☐ No ☐

34. If others do not agree with my views then I change my though

Yes ☐ No ☐

35. I support everyone in their work

Yes ☐ No ☐

36. I feel that I am not worthy of any work

Yes ☐ No ☐

37. I often forgot the words given to others

Yes ☐ No ☐

38. I stay away from group programs

Yes ☐ No ☐

39. I gives more importance to my work than other's work

Yes ☐ No ☐

40. Being too honest may bring more loss than gain

Yes ☐ No ☐

APPENDIX II

APPENDIX III

ICT SCALE

Age: _____

Gender: _____

Name of the institution: _____

Name of the department: _____

Educational Qualification: _____

Urban / Rural: _____

Instructions

1. This scale will be used for research purposes and it will be kept confidential. Every respondent is requested to carefully read the booklet and answer honestly.
2. Fill in the box with a tick mark that corresponds to your answer for each statement.

1. Basic Knowledge of ICT Skills

1. I can use storage devices (pendrive, hard disk etc.) for storing and sharing important documents, files, pictures etc.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

2. I can use the IT facilities (projector, printer and computer) available in my institution

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

3. I can make a text document and change text fonts and size using Microsoft Word.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

4. I can make a slideshow using Microsoft Powerpoint with slide animations.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

5. I can install antivirus programs to protect my computer and smart phone.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

6. I can send and receive an email.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

8. I can use search engines to visit websites on the internet.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

10. I can install programs (following instructions on the screen or the manual).

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

2. Intermediate

11. I can print Word documents using the back-to-back feature on printers.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

12. I can use advanced Word Processing features such as creating tables or templates.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

13. I can make Bookmarks or Favorites on my web browser.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

14. I can use one or more instant messaging applications (Whatsapp, Facebook Messenger, Viber, Skype, etc.) for communication.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

15. I can share files using smartphones and laptops for disseminating study materials.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

16. I can participate in online discussions and chat forums.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

3. Advanced Skills

17. I can use advanced terms (use quotation marks, dates, use '-' to remove specific sites) to narrow down results on Google search engine.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

18. I can enhance slide presentation by adding sound, customizing animation and inserting images and video clips.

With ease ☐ With some difficulty ☐ With lots of difficulty ☐ Unable ☐

19. I can use Microsoft Excel's functions to calculate and graph data.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

20. I can use call conferencing using smart phones and computers.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

21. I can effectively use online and offline features of Digital E-Book Readers (Kindle, Nook, Kobo e-reader, etc.).

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

22. I can make use of podcast to support my learning and access information.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

23. I can access information through online libraries.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

24. I can use offline and online help facilities for troubleshooting, maintenance and update of applications.

With ease	With some difficulty	With lots of difficulty	Unable
☐	☐	☐	☐

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ABSTRACT

EFFECT OF LIFE SKILLS ON SOCIAL INTELLIGENCE AND ICT COMPETENCIES OF STUDENT TEACHERS OF MIZORAM

AN ABSTRACT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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EFFECT OF LIFE SKILLS ON SOCIAL INTELLIGENCE AND ICT COMPETENCIES OF STUDENT TEACHERS OF MIZORAM

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In partial fulfilment of the requirements for the Degree of Doctor of Philosophy in Education of Mizoram University, Aizawl

INTRODUCTION

Developing our capacity for what is typically referred to as "life skills" includes learning how to think critically, solve problems, be self-aware, manage stress, make decisions, interact with others, control our emotions, or even just manage stress and emotions. People may convert their knowledge, attitudes, and beliefs into useful talents and action (what to do and how to do it) through the application of life skills. Life skills are the aptitudes for flexible and constructive behaviour that enable people to successfully handle the demands and barriers of daily life, according to the World Health Organisation (1999). No matter if you're a student or a teacher, having life skills is essential because they help us develop our creativity, enable us to succeed where we can, increase our resilience and problem-solving skills in areas where we may be limited, and get us ready for a variety of social situations that would otherwise be very difficult. The development of various life skills leads to a body of information about how to approach everyday situations both within and outside of educational institutions in a methodical way.

In order to live a fulfilling life, people ought to be intelligent in general and socially intelligent in particular. Only social intelligence holds the key to solving this issue; high I.Q levels alone are insufficient to make an individual ideal for society. It aids people who find it difficult to adapt and adjust in social settings. Thorndike (1920) defined social intelligence as the capacity to comprehend people and behave sensibly in interpersonal interactions. Social intelligence is a feature of a person's mental capacity that enables social adaption. To develop an ideal and productive work environment, social intelligence is necessary for developing the abilities of effective verbal and nonverbal communication, teamwork, interpersonal relationships, assertiveness, empathy, compassion, and management skills.

Having excellent social skills is very essential and effective for carrying out the duty and responsibilities of a teacher. Social intelligence is crucial for teachers to connect with students in an efficient manner and to comprehend pupils in the classroom, in along with their social environment.

ICT is the fusion of computers and the telecommunications. Computers enable people to work creatively but they are limited by what they can access. Adding a communications channel, such as the internet or other information services, significantly extends the capability of the computer. It can also become a means of obtaining education, information and working creatively with others irrespective of geographical barriers (Pathak & Chaudhury, 2012).

According to Yuen et al. (2005), ICT in education refers to any information technology that focuses on the capture, storage, modification, management, transmission, or receipt of data needed for educational purposes. The potential for teaching and learning is virtually limitless thanks to the use of ICT by educators and students alike. Communication is the sharing of thoughts, feelings, experiences, and information between two or more people. Technology is crucial in the conversion of data into information, knowledge, and wisdom (Kozma, 2005). Teachers who are proficient in problem-solving techniques, critical thinking skills, interpersonal and social relationships, managerial skills, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication are efficient and effective in the teaching profession.

Teachers who lack social intelligence, life skills, and ICT literacy may feel unqualified for their position, anxious, and unable to handle difficult circumstances or build a professional network. Due to pupils' weak ICT or digital capabilities and lack of core life skills, teachers, students, and whole process of learning and institution may encounter a variety of challenges.Therefore, in order to be regarded as professionals, teachers must adopt innovative attitudes, be flexible in their tactics, and keep up with changes in their domains of expertise. They should also be able to understand the worth of human potential, identify the various demands of the students, and provide an environment that is favourable to learning. The ability of a teacher to use ICT, social intelligence, and life skills will have a significant influence on how successful and productive his or her pupils are. Teachers who are proficient in problem-solving techniques, critical thinking skills, interpersonal and social relationships, managerial skills, teamwork and collaboration abilities, managing stress and emotions, making the most of

modern technology, and both nonverbal and verbal communication are efficient and effective in the teaching profession.

Without teachers being entirely comfortable with new techniques of integrating ICT in the classroom, providing students with access to computers and instructional content would not have much of an influence on the teaching and learning process. Future educators, including student teachers, must stay current with cutting-edge technology in order to be proficient in it. Through teacher preparation, pre-service teachers may learn how to become effective and efficient educators. Thus, it is essential to impart knowledge, help people learn and improve life skills, and make the best use possible of the institutions' IT resources during their pre-service training course. It has been observed that the B.Ed. curriculum has been designed, modified, and revised over the years at regular intervals with the sole aim and objective of fully fostering excellent teaching skills among the student-teachers. Life skills empower the young teacher trainees to act responsibly, take initiative, and take control. Life skills training helped in improving self-esteem, self-efficacy, communication skills, and adjustment for these student-teachers (Mishal, 2016). ICT isn't merely seen as a supplement to or a replacement for traditional educational strategies. ICT is viewed as a crucial tool to promote innovative teaching and learning methodologies.

RATIONALE OF THE STUDY

In order to manage students and class room environment successfully, teachers must possess a variety of skills. These include interpersonal relationship skills, effective communication, conflict resolution, coping with stress and emotion, cooperation skills, and empathy. This leads to enhanced student engagement and learning. Teachers are efficient and effective in the teaching profession when they are skilled in problem-solving methods, critical thinking abilities, interpersonal and social relationships, managerial abilities, teamwork and collaboration abilities, managing stress and emotions, making the most of modern technology, and both nonverbal and verbal communication methods.ICT in education enhanced teaching and learning activities by allowing the learners to learn from experts across the world besides classroom lectures, ICT allows for new ways of learning beyond traditional classroom lectures for students and teachers. With numerous unusual occurrences occurring in our lives, e-learning is becoming increasingly prevalent. As a consequence, educational institutions are now given greater opportunities to make sure that students have access to curriculum materials

outside of the classroom as well as at home and even in hospitals. Students with special needs are no longer at a disadvantage as they have access to essential material and special ICT tools can be used by special students for their own educational needs. This is proof that these advancements are beneficial and are now considered an essential part of our lives. This study has been undertaken to find out the level of life skills, social intelligence and ICT competencies of student teachers in Mizoram.

In the 21st century where education of women has taken on an increasingly significant role, it is important to find out whether there is any difference in the level of life skills, social intelligence and ICT competencies. Although most of the studies reviewed have highlighted that there is no significant difference in the level of life skills, social intelligence and ICT competencies between male and female students, it is necessary to prove or disprove this in societies like Mizo society where women education have been a backseat for so long. Thus, a research of this kind is much needed to shed light on this matter.

In the areas of life skills and social intelligence, life skills and emotional intelligence, life skills and achievement motivation, social intelligence and emotional intelligence, ICT and teaching methodology, and ICT and education, it has been observed that many researchers have conducted research using descriptive and experimental methods. Numerous research have been conducted on ICT, social intelligence, and life skills. Despite this, there remains a study deficit on how life skills affect social intelligence and ICT competencies. Therefore, it is crucial to acquire accurate data on this subject in order to both confirm our presumptions about how life skills affect social intelligence and ICT competences as well as to assist other studies who may benefit greatly from having access to such data. The results from this study will, it is anticipated, offer further inputs to higher education institutions regarding the development and implementation of pre-service and in-service teacher training programs.

With reference to the above facts, the following research questions arise:

1. What is the effect of life skills on social intelligence of student teachers?
2. What is the effect of life skills on ICT competencies of student teachers?
3. Is there any significant difference between male and female student teachers in their level of life skills?
4. Is there any significant difference between male and female student teachers in their level of social intelligence?

5. Is there any significant difference between male and female student teachers in their level of ICT competencies?
6. What is the status of ICT infrastructure in teacher training institutes of Mizoram?
7. What is the level of use of the available ICT infrastructure by the student-teachers?

STATEMENT OF THE PROBLEM

In the light of the much needed information with regard to the effects of life skills on social intelligence and ICT, the problem of the study has been stated as:

"**Effect of Life Skills on Social Intelligence and ICT Competencies of Student Teachers of Mizoram**"

OPERATIONAL DEFINITION OF THE TERM USED

The terms used in the title of the study carry some specific meanings. The operational definitions of these terms are given as follows:-

Life Skills: Life skills are any skills acquired through learning, direct or indirect life experiences that enable individuals to effectively handle issues and problems commonly encountered in our daily life. In the present study, the term Life Skillsreferred to the score of the sample students in Life Skills Scale developed by Raina Tiwari

Social Intelligence: Social intelligence refers to an ability to get along with others and also winning their co-operations. For the present study, social intelligence is represented by the score which is obtained from the Social Intelligence Scale developed by N. K. Chadha and Usha Ganesan

ICT Competencies:ICT competencies are a competence to use Information Communication and Technology in particular domains. For the present study, ICT competencies referred to the score of the sample students in ICT competencies developed by the investigator.

Student Teachers:Student teachers are those who are learning under the supervision of a certified teacher in order to qualify for a degree in education. For the present study student teachers referred to all the B. Ed students of Mizoram

Gender: For the present study gender refers to the male and female student teachers.

OBJECTIVES OF THE STUDY

1. To find out the level of life skills of student teachers of Mizoram.
2. To find out the level of social intelligence of student teachers of Mizoram.
3. To find out the level of ICT competencies of student teachers of Mizoram.
4. To compare the level of life skills of student teachers of Mizoram with reference to their gender.
5. To compare the level of social intelligence of student teachers of Mizoram with reference to their gender.
6. To compare the level of ICT competencies level of student teachers of Mizoram with reference to their gender.
7. To find out the effect of life skills on social intelligence of student teachers of Mizoram.
8. To find out the effect of life skills on ICT competencies of student teachers of Mizoram.

HYPOTHESES

The following hypotheses are framed in relation to the identified objectives:

1. There is no significant difference in the level of life skills of student teachers of Mizoram with reference to their gender.
2. There is no significant difference in the level of social intelligence of student teachers of Mizoram with reference to their gender.
3. There is no significant difference in the level of ICT competencies of student teachers of Mizoram with reference to their gender
4. There is no significant effect of life skill on social intelligence of student teachers of Mizoram.
5. There is no significant effect of life skill on ICT of student teachers of Mizoram.

REVIEW OF RELATED LITERATURE

A total of 127 reviews have been incorporated in the study. There were 46 studies related to life skills, 40 studies related to social intelligence and 41 studies related to ICT competencies. The review period range from 1980 to 2022.

METHODOLOGY

Research is a systematic investigation into a phenomenon to establish relationship between variables in order to arrive at a valid conclusion. It may also be defined as 'the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles or theories, resulting in prediction and possibly ultimate control of events' (Best & Kahn, 2004). Methodology is the science of methods. Divergent methods which are used by the researchers during the course of studying the research problem can be termed as research methodology. This chapter's primary goal is to explain the methodological elements, including study design, population and sample, data gathering instruments, tool administration, and data collection. Research design is a plan outlining the steps the researcher will take, starting with writing goals, hypotheses, and their operational consequences, and ending with findings from data analysis. Given that it outlines the complete research process, a research plan aids the researcher in discovering solutions to the research problem and other issues raised by the study. Additionally, a research design instructs us how to gather data, what observations should be made, how to make them, and how to evaluate the data.

The design informs the investigator's choice of statistical methods for analysis. In experimental study, design also provides guidance for controlling specific factors.The decision about the method depends upon the nature of the problem selected for the study and the kind of data, necessary for the fulfilment of the objectives of the study. The present study is descriptive in nature. A descriptive study describes and interprets the present status of what is being studied, recording, describing, analyzing and interpreting the conditions that already exist. Descriptive study describes and interprets 'what is'. 'It is concerned with condition or relationships that exist, opinions that are held, processes that are going on, the effects that are evident, or trends that are developing' (Best & Khan, 2004).As the present research was to describe and interpret the effect of life skills on social intelligence and ICT competency of student teachers of Mizoram. Here the purpose is concerned about 'what is' the effects of independent variable upon dependent variable to see if they support emerging generalisations is another focus of the research.

POPULATION AND SAMPLE

For the present study all student teachers pursuing B. Ed course during the academic years 2020- 2022 in Mizoram constituted the population of the study since the present study is concerned with the study of the effect of life skills on social intelligence and ICT competency

of student teachers of Mizoram. The sample consists of 451 student teachers in Mizoram using probability proportional to size sampling procedure. Probability proportion to size sampling is a sampling procedure under which the probability of a unit being selected is proportional to the size of the ultimate unit, giving larger clusters a greater probability of selection and smaller clusters a lower probability, in order to ensure that all units (example. people/organisation) in the population have the same probability of selection irrespective of the size of their cluster. Probability proportion to size sampling procedure is useful when the sampling units vary considerably in size because it assures that those in larger sites have the same probability of getting into the sample as those in smaller sites, and vice versa.

Most of the educational phenomena consist of a large number of units. It is not possible to contact each and every element of the population. The investigator has to select some individuals who would represent the whole population. The representative proportion of the whole population is called as a sample. 'A sample is a small proportion of the population that is selected for observation and analysis. By observing the characteristics of the sample, one can make certain inference about the characteristics of the population from which it was drawn.' (Best & Kahn, 2010). Samples were takenfromDIET Aizawl, Institute of Advanced Studies in Education, Department of Education of Mizoram University and DIET Lunglei. The details of the actual number of student teachers are shown in Table 1 and Table 2.

Table 1

Population of Student Teachers of Mizoram

	Population		**Total**
	Male	**Female**	
IASE	62	186	248
MZU	118	62	200
DIET Aizawl	59	41	100
DIET Lunglei	67	33	100
Total	648*		

**student-teachers of both 2nd and 4th semester*

Table 2

Sample of Student Teachers of Mizoram: Gender wise

Institutions	Gender		Total
	Male	Female	
IASE	86	44	130
MZU	92	72	164
DIET Aizawl	50	39	89
DIET Lunglei	48	20	68
Total	276	175	451*

**student-teachers of both 2nd and 4th semeste*

TOOLS USED

A research tool is an instrument that is used for data gathering and has been shown to be reliable and accurate. The regularity of the tool or procedural performance is its level of dependability. The ability of data collection method or instrument to gauge what is intended to quantify is known as validity. Keeping in view the objectives of the present study the following were the tools used by the researcher:

1. Life Skills Scale (2013-2014) standardized by Raina Tiwari, published by Ascending Psychology Center, 1173, Sneh Nagar, Gada Road, Jabalpur (MP) 482002.
2. Social Intelligence Scale (2013) standardized by N. K. Chadha and Usha Ganesan, published by National Psychological Corporation, Agra 1971.
3. Scale for assessment of the competencies of student teachers on ICT wasdeveloped by the researcher.

COLLECTION OF DATA

All of the tools applied in this investigation were self-administering scales. The original sources from which the data were gathered. Except at DIET Lunglei, where data were gathered via a Googleform facade owing to the covid-19 pandemic, the investigator personally visited the institutes chosen for the research. After getting approval from the institution's administrators, the scales were given to the student instructors. During the hour of class, the institution's professors assisted in administering the scales. The goal of the study and the fact that the information gathered would be kept private and utilised solely for research were both

highlighted throughout the administration of the scale. There was a considerable of priority placed on the fact that there is no right or incorrect response to any of the scale's claims, and the respondents were asked to provide honest and accurate responses to all of the items (without missing any item or statement). The Life Skills Scale, Social Intelligence Scale, and ICT Competency Scale were distributed once the student instructors received the relevant guidelines and instructions about the scales. The entire process took an hour and a half.

The data collected from the student teachers were scrutinized and tabulated after scoring the responses on all of the tests using the test scoring procedures given in the respective manuals. Each respondent was assigned a serial number and their details regarding gender and the scores of the three tests were entered in the tabulation sheet and these were subjected to statistical treatment. For this, the following statistical tests were employed.

MODE OF ANALYSIS

Keeping in view the nature of the data and objectives of the study, the investigator employed the following techniques for analyzing the data.

Descriptive statistics were used such as:

1. Measures of central tendency of mean. Measures of central tendency are the most basic and, often, the most informative description of a population's characteristics. They describe the average member of the population of interest.
2. Measures of dispersion of standard deviation which provides information about the spread of a variable's values.
3. Test of significance for mean differences. The t-test was used to find out the significant difference between male and female student teachers
3. Correlation to find out how the independent variable is related to the dependent variable. Measures of association indicate whether two variables are related. Pearson product moment correlation was used to find out the strength of the relationship between the independent variable (life skills) and dependent variables (social intelligence and ICT competencies).

Inferential statistics such as linear regression analysis was used to examine the influence or effect of one or more independent variable on dependent variable. To predict the effect of independent variable (life skills) on dependent variables (social intelligence and ICT competencies) linear regression analysis was adopted.

MAJOR FINDINGS OF THE STUDY

Objective No. 1: Level of life skills of student teachers of Mizoram

The findings of the present study revealed that out of 451 student teachers, 216 (47.89%) had high level of life skills, 190 (42.13%) of student teachers had average life skills and 45 (9.98%) of student teachers had low level of life skills. The mean score and standard deviation of the level of life skills of 451 student teachers of Mizoram were found to be 26.95 and 5.54 respectively. Therefore, it may be inferred that student teachers of Mizoram had average level of life skills.

Discussion:

The findings of the present study show that student teachers of Mizoram had average level of life skills. Similar research studies across India were also taken up by some researchers and found that the level of life skills of B. Ed students had average level of life skills (Sandhu 2014, Sridevi & Amuthavalli 2019**,** and Das 2019). In contrast to the results of the present research, Vijayalakshmi (2019) in Tamil Nadu discovered that B.Ed. teacher trainees had a very high degree of life skills. A research in Haryana conducted by Sandhu (2014) revealed that 24% of student teachers had low level life skills, 4% of student teachers had low level life skills, and 72% of student teachers had medium level life skills. In Karnataka, Dayaprasad (2019) discovered that 49.4% of B.Ed. teacher candidates had poor life skills. 13.6% had excellent levels of life abilities, and 37.0% had moderate level of life skills.

Objectives No. 2: Level of social intelligence of student teachers of Mizoram

The results of the present research revealed that student teachers of Mizoram had a mean score and standard deviation of 102.79 and 9.04, respectively, for social intelligence. Thus, it can be concluded that Mizoram's student-teachers had above-average levels of social intelligence. Out of 451 student teachers, 9(1.99%) of student teachers were having extremely high level of social intelligence, 22(4.88%) of student teachers were having high level of social intelligence, 128(28.38%) of student teachers were having above average level of social intelligence, 161(35.69%) of student teachers were having average level of social intelligence, 80 (17.74%) of student teachers were having below average level of social intelligence, 35 (7.76%) of student teachers had low level of social intelligence and 16(3.55%) student teachers had extremely low level of social intelligence.

Discussion:

The findings of the present study revealed that student teachers of Mizoram had above average level of social intelligence. The finding of the present study conducted of Mizoram can be further assimilated and incorporated with the finding of the similar study conducted across India and aboard, the results indicated that B. Ed students were having above average and average level of social intelligence (Parveen Rani 2018, Kharluni&Erigala 2018,Uygun et al. 2020, Jasleen et al.2021). Jeloudar and Yunus (2011) in Malaysia found that secondary school teachers had average level of social intelligence.Jeloudar et al. (2012) found that school teachers from India, Malaysia and China had average level of social intelligence. Kharluni and Erigala (2018) in Meghalaya found that 1.4% of secondary school students had very high level of social intelligence, 6.9% had high level of social intelligence, 57.4% had average level of social intelligence, 26.9% had low level of social intelligence and 7.4% had very low level of social intelligence. Anbalagan and Kasirajan (2020) in Tamil Nadu found that 15.7% of student teachers had low level of social intelligence, 69% of student teachers had moderate level of social intelligence and 15.3% of student teachers had high level of social intelligence.

Objective No. 3: Level of ICT competencies of student teachers of Mizoram

A Likert type ICT competencies scale has been constructed for the present study. Reliability was measured by using cronbach's alpha and spearman brown prophecy coefficient. The internal consistency measure cronbach's alpha obtained was found to be 0.881 and thus it was interpreted that the test was highly reliable. Similarly spearman brown prophecy coefficient and the gultman split half coefficient value were 0.9 and 0.887 respectively. Content validity was established by giving the scale to several experts in the field of ICT with a request to rate the items and provide feedback. It was found that the scale was sufficiently valid based on their comments and responses.

According to the results of the present study, student-teachers of Mizoram had an ICT competency score that was 58.45 on average and 11.44 on a standard deviation scale. Thus, it can be said that Mizoram's student-teachers had an average level of ICT proficiency. 148 (32.81%) of the 451 student-teachers had high level of ICT proficiency. Out of 451 student teachers, 292 (64.74%) had average level of ICT competencies, and 11 (2.4%) had low level. Thus, the finding indicates that more than half of the student teachers had average level with regard to ICT competency.

Discussions:

When ICT Scale developed by the investigator was administered to 451 student teachers of Mizoram, the findings of the present study found that those student teachers of Mizoram were found to be having average level of ICT competencies. Similar study conducted by Vasilka et al. (2015) in Macedonia found that 25%, one-fourth of the teachers in primary schools had below basic ICT competency, 17% had basic knowledge and skills to operate a computer, and more than half, 58 had proficient level of ICT competencies.Gupta (2017) in Noida found that 53.3% of B.Ed. trainees were having below average level of ICT competencies, 46.6% were found to be having above average level of ICT competencies.

Objective No. 4: Levels of life skills of student teachers of Mizoram with reference to their gender

According to the findings of this study, male student teachers had a mean score of 27.29 and a standard deviation of 5.59 in terms of their degree of life skills. Comparable results were obtained for female student teachers, with mean scores and standard deviations of 26.73 and 5.49, respectively. Therefore, it may be inferred that male student teachers and female student teachers had average level of life skills. There was only a slight difference on their mean scores and the obtained difference may be attributed to chance factor. Out of 145 male student teachers, 87 (49.71%) were having high level of life skills, 69(39.43%) of male student teachers were having average level of life skills and only 19(10.86%) of male student teachers were having low level of life skills. Out of 276 female student teachers, 129(47.44%) female student teachers were having high level of life skills, 121(43.84%) of female student teachers were having average level of life skills and 26(9.4%) of female student teachers were having low level of life skills.

An inferential statistic like the t-test was used to determine whether there were any appreciable disparities in the level of life skills between male and female student teachers in Mizoram. The t-test result revealed that there was no significant difference in the levels of life skills between male and female student teachers in Mizoram. A minor differential favouring male student-teachers was discovered when their mean scores were taken into account, although it was not statistically significant.

Discussions:

There was no discernible difference between male and female student-teachers of Mizoram in terms of their level of life skills. A small difference favouring male student-teachers was discovered when their mean scores were taken into account, but it was not statistically significant. There are no discernible differences between male and female student instructors' levels of life skills, according to the results of this research, which are consistent with those of other studies conducted in India and abroad (Sarla et. al 2022, George 2021, Alaka 2019, Das 2019,Vijayalakshmi 2019, Kharluni&Erigala2018, Vijayarani& Geetha 2017, Sandhu 2014,Asmitaben 2012**,** Garg 2011,). In contrast to the findings of the present study, some studies found that male were having higher level of life skills as compared to female (Ajitha2007, King 1999. Contrasting to the findings of Ajitha (2007), King (1999), Dayaprasad (2019) female were having higher level of life skills (Sridevi & Amuthavalli 2019, Sridevi 2019).

Objective No. 5: Level of social intelligence of student teachers of Mizoram with reference to their gender.

The present study found that the female student-teachers had a mean social intelligence score of 103.41 and a standard deviation of 8.57. The mean scores and standard deviation of male student teachers were found to be 101.81 and 9.69, respectively. Therefore, it can be said that both male and female student teachers had average levels of social intelligence. However, a comparison of their mean scores showed that the mean score of male student teachers were slightly higher than those of female student teachers, though this difference was not statistically significant. Out of 175 male student teachers, 3(1.71%) were having extremely high and 6 (3.43%) of student teachers had high level of social intelligence. 48 (27.43%) of male student teachers were having average level of social intelligence, 58 (33.14%) of male student teachers were having above average level of social intelligence and 32 (18.29%) of male student teachers were having below average level of social intelligence. 22(12.57%) of male student teachers were having low level of social intelligence and 6(3.43%) of male student teachers were having extremely low level of social intelligence. Out of 276 female student teachers, 6(2.17%) were having extremely high level of social intelligence, 16(5.79%) of student teachers had high level of social intelligence, One-fourth of female student teachers, 70 (25.36%) were having above average level of social intelligence, 113(40.94%) of female student teachers were having average level of social intelligence and 48(17.39%) of female student teachers were having below average level of social intelligence.

13(4.71%) of female student teachers were having low level of social intelligence and only 10(3.62%) of female student teachers were having extremely low level of social intelligence.

In order to find out the significant differences between male and student teachers of Mizoram on their level of social intelligence, inferential statistic such as t-test was used and it was found that there was no significant difference in the levels of social intelligence between male and female student teachers of Mizoram. Considering their mean scores, a slight difference was found favouring male student teachers but not statistically significant. An attempt was made to show the significant difference between male and female student teachers on the eight dimensions of social intelligence scale. The social intelligence scale was divided into five parts; the first part contains 36 questions to evaluate patience (8 questions), co-operativeness (11 questions), confidence (8 questions) and sensitivity (9 questions). The second part contains 3 questions to check recognition of social environment. The third part contains 7 questions to evaluate tactfulness. The fourth part contains 8 questions to evaluate sense of humour. The fifth part contains 12 pictures to check memory. Results of the detailed analysis showed that there was no significant difference between male and female student teachers on their level of patience, co-operativeness, confidence and sensitivity. The t-test result showed that there was no significant difference between male and female student teachers on their level of recognition of social environment. The t-value for the significant difference between male and female student teachers on their level of tactfulness revealed that there was no significant difference between male and female student teachers on their level of tactfulness. The t-value for the significant difference between male and female student teachers on their sense of humour revealed that there was significant difference between male and female student teachers on their sense of humour, female student teachers showed higher level in their sense of humour as compared to the male student teachers. The t-value for the significant difference between male and female student teachers on their level of memory revealed that there was no significant difference between male and female student teachers on their level of memory.

Discussions:

No significant difference was observed in the levels of social intelligence between male and female student teachers in Mizoram. The finding of the present study conducted of Mizoram can be further assimilated with the findings conducted by some studies which showed no significant differences between male and female student teachers in their level of social intelligence (Barbera et al. 2003, Gnanadevan 2007, Dixit & Kaur 2015**,** Rani 2016,

Tiakala2016, Arthi&Tamilselvi 2016**,** Rani &Shaili 2017**,** Kharluni&Erigala 2018**,** Bhattacharyya &Sanghamitra 2018**,** Asgharet al. 2019, Jasleen et al. 2021, Kaur et al. 2021).Notwithstanding the findings of the present study, Uygun et al. (2020) in Turkey found that female pre-service teachers had higher level of social intelligence as compare to male pre-service teachers. Kamil and Bilal (2020) in Turkey found that the level of social intelligence of female pre-service social science teachers was higher as compared to male pre-service social science teachers.

A study conducted by Arthi and Tamilselvi (2016) in Tamil Nadu found that there was no significant difference between male and female B. Ed student teachers in their level of social intelligence. Detailed analysis of the eight dimensions of social intelligence revealed that there was no significant difference between male and female B. Ed student teachers in co-operativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humour and memory. The findings of their study also found that there was significant difference between male and female B. Ed student teachers in the patience dimension yet female student teachers had higher level of patience as compared to male B. Ed student teachers. A study conducted by Kaur et. al (2021) in Punjab found that there was no significant differences between male and female teacher trainees in their level of social intelligence. Detailed analysis of the eight dimensions of social intelligence revealed that there were no significant differences between male and female teacher trainees in patience, confidence, sensitivity and tactfulness. The findings of their study revealed that there were significant difference between male and female teacher trainees in cooperativeness, recognition of social environment, sense of humour and memory; male teacher trainees had higher level of memory, sense of humour and recognition of social environment as compared to female teacher trainees. The result of their study also revealed that female teacher trainees showed higher level in the dimension of cooperativeness.

Objective No. 6: ICT competency levels of student teachers of Mizoram with reference to their gender.

The findings of the present study revealed that the mean score and standard deviation of the level of ICT competencies of male student teachers were found to be 59.56 and 12.53 respectively. Similarly, the mean score and standard deviation of the level of ICT competencies of female student teachers were found to be 57.75 and 10.66 respectively.

Therefore, it may be inferred that male and female student teachers have average level of ICT competencies. Out of 175 male student teachers half of the male student teachers, 91(52%), were having average level of ICT competencies, 77(44%) of male student teachers were having high level of ICT competencies and 7(4%) of male student teachers were having low level of ICT competencies. Out of 276 female student teachers, 201(72.83%) were having average level of ICT competencies, 66 (23.91%) were having high level of ICT competencies and only 4(1.45%) were having low level of ICT competencies.

A hypothesis was formulated and an inferential statistic like the t-test was used to determine whether there were any significant variations in the levels of ICT capabilities between male and female B. Ed students of Mizoram. It was found that there were no such disparities. Male student teachers had higher mean scores than female student teachers, which indicate that they have higher levels of ICT competence than female student teachers, albeit this difference is not statistically significant. Studying the stark differences between male and female student instructors on the three ICT aspects was attempted. The ICT scale was divided into three dimensions to evaluate the Basic (9 items), Intermediate (6 items) and advanced (9 items) ICT competency. The significant difference between male and female student teachers on their level of basic ICT Competencies was significant at 0.05 levels. A comparison of the mean scores in basic ICT competencies of male and female student teachers revealed that the mean score of male student teachers was higher as compared to the mean score of female student teachers. The significant difference between male and female student teachers on their level of intermediate ICT Competencies was significant at 0.05 levels. A comparison of their mean scores revealed that male student teachers had higher mean score as compared to female student teachers. There was no significant difference between male and female student teachers on their level of advanced ICT competency.

Discussions:

No significant difference was found in the levels of ICT competencies among male and female student teachers of Mizoram. Comparison of their mean scores showed that male student teachers were having higher mean score than female student teachers which means male student teachers have higher level of ICT competencies than female student teachers but not statistically significant. Detailed analysis of the three dimensions of ICT competencies between male and female student teachers showed that there was significant difference between male and female student teachers in their level of basic and intermediate ICT competencies, male student teachers had higher basic and intermediate ICT competencies as

compared to female student teachers but not statistically significant. The result of the gender comparison on advanced ICT competencies showed that there was no significant difference between male and female student teachers on their level of advanced ICT competencies.

Other researchers also looked at studies on the ICT proficiency of teachers and teacher trainees, and they discovered no appreciable differences between male and female B. Ed student teachers (Cavas et al. 2009, Gulkane 2011, Yusuf & Balogun 2011, Samson 2013, Deivam 2016, Durgadevi& Ahamed 2017, Tondeura 2018, Lin et al. 2022).The results of the current study, which was conducted in Mizoram, can be correlated with those of the study, which was conducted in Nigeria; they showed that there was no discernible difference in male and female student-teachers' use of ICT (Yusuf & Balogun 2011).Another study conducted in Malaysia indicated that there were no significant gender differences in terms of word processing, presentation, spreadsheet, World Wide Web, email, database, social networking and utility competency among the pre university students (Teck & Lai 2011).

Objective No. 7: Effect of life skills on social intelligence of student teachers of Mizoram.

It was hypothesized that high level of life skills will positively predict high social intelligence. The data collected were analyzed using Pearson r correlation and linear regression analysis was used to test the 'Ho. 5: There is no significant effect of life skills on social intelligence of student teachers of Mizoram.' The result of correlation analysis revealed that the correlation was 0.177 which was positive and found significant at 0.01 levels which indicate significant relationship between life skill and social intelligence. In addition, the result of linear regression analysis on the impact of life skills on social intelligence showed that the estimated regression coefficient of life skill (i.e. 0.287) was found significant at 0.01 level, while the F-statistic of the ANOVA was also highly significant. Thus, it may be concluded that the life skills of the student teachers of Mizoram have positive effect on the social intelligence.

Discussion:

The results of this study showed that high levels of social intelligence among student teachers of Mizoram were predicted by high levels of life skills; vice versa, as life skills levels rise, so do social intelligence levels. Several more studies highlight the consequences, influence, and connection between social intelligence and life skills. The same results can be subsumed with the study conducted in Bengaluru showed that there was a significant effect of

life skill training on social intelligence among private school adolescents (Sowmyashree & Sreenivasa 2019). A study conducted in Iran showed that life skills training had a significant and positive impact on social skills in the experimental group, whereas there was no significant difference in the control group (Saiedeh et al. 2017). Another study conducted in Nagaland indicated social intelligence was significantly related with life skills (Tiakala 2016).

Objective No. 8: Effect of life skills on ICT competencies of student teachers of Mizoram.

It was hypothesized that high level of life skills will positively predict high ICT competencies**.** From the results of regression analysis, the regression coefficients are not significant. So, it may be concluded that life skill has no significant effect on the ICT competency, which justifies the study hypothesis 'Ho.6: There is no significant effect of life skills on ICT competencies of student teachers of Mizoram'. The regression analysis revealed that 03.1 percent of variance in life skills was accounted by social intelligence. The dependent variable (ICT competency) was regressed on predicting variable (life skills) to test the null hypothesis (Ho6). Life skills significantly does not predict the ICT competencies, and the calculated $F(1,450) = 14.54$, $p < 0.001$, which indicates that the life skills do not play a significant role in the ICT competencies ($b=.177$, $p <0.001$).

Discussion:

From the results of regression analysis on impact of life skills on ICT competencies, the regression coefficients are not significant which means if the level of life skills increases the level of ICT competencies level may or may not increase. The Pearson r correlation analysis showed relationship between life skills and ICT competencies to some extent. The findings of the present study corroborate to the finding by Dhawan (2012) in which the research results revealed that boys are found to prefer more of Executive and Scientific areas whereas girls were found to be more inclined towards Literary and Household areas. No significant interaction effect of ICT competencies and life skills was found on vocational preference of 11th class students and ICT competencies have significant influence on life skills of both boys and girls.

EDUCATIONAL IMPLICATIONS

Teachers set an example for their pupils by modelling behaviour in the classroom and outside of the school. It is impossible to overstate the role and value of teachers in society. In the area of education or in a particular teaching-learning scenario, the teacher is the most

important agent who disseminates information, sets the schedule, chooses reading materials, assumes the position of topic expert, assesses learning outcomes, and aids students in overcoming obstacles and personal issues. He establishes the bar and cultivates what is admirable. The social intelligence of the student teachers was shown to be significantly impacted by life skills in the current study, and these findings have implications for teachers, administrators, educationalists, and of course students. According to the current study, social intelligence and life skills are positively correlated, thus student instructors who have strong life skills will also have strong social intelligence. A high degree of life skills aids in one's ability to work effectively and efficiently as a teacher.It helps in reducing the antisocial activities, reduces the stress, helps in controlling the emotions and establishes good relationship between teacher and student for effective teaching-learning. Life skills education is an important subject which must be taught in our educational institutions especially in pre-service teacher education. Thus, there is a direct need of integrating life skills in the curriculum of pre-service training institutions. In order to transact the curriculum successfully, educator must be trained continuously to develop the life skills in the student teachers properly. Successful integration of life skills can be achieved through subjective as well as practical tasks. Besides practice teaching, classroom discussion to provide opportunities for develop solving problems skills and to enable learners to have an in-depth understanding of the topic and develops skills, in listening, assertiveness, and empathy, group task to maximize students engagement and interactions to develop and learn cooperation, collaboration with others, and debatesto provide the chances to discuss issues in depth and creatively can be introduced to integrate life skills in teaching practice programme.

From the findings of the present study, majority of the student teachers of Mizoram had average level of life skills and social intelligence and there were no gender differences on their level of life skills and social intelligence of student teachers of Mizoram. The study also revealed that the level of life skills of student teacher of Mizoram has positive effect on the level of social intelligence of student teachers of Mizoram, which implies that student teachers who have high level of life skills will also have high level of social intelligence, if the level of life skills increases the level of social intelligence will increase and vice versa. These results will give immense help to students, teachers, educational administrators, stakeholders and college counsellors to identify the social problem of the students and provide them the adequate solution for their problem through life skills training and it is important for the teachers' educator to not only influence the student teachers academically, but also socially

and morally. The findings of the present study emphasize the importance of life skill centred curriculum in teacher training institutions. So teachers must develop the interpersonal relationship skills, self-awareness, empathy, coping with stress, coping with emotion, critical thinking skills, creative thinking skills, problem-solving skills, and effective communication skills, to receive constructive feedback, to cooperate and collaborate with others, and also inculcate these skills within their training period.The curriculum, teaching designs and classroom environment of the teacher training institutions should be such that it inculcates the life skills and social skills of student teachers. The curriculum developer, curriculum coordinator need to delineate life skill development programmes and also integrate it as a part of pre-service curriculum of Mizoram. Curriculum should be focused at enhancing the social intelligence, life skills and ICT competencies of the each student teacher.

The present study revealed that life skills have no significant effect on the ICT competencies of student teachers of Mizoram, which implies that an increase in the level of life skills will not predict increase in the competencies level of ICT of student teachers. The findings of the present study also revealed that majority of the student teachers of Mizoram had high and average level of ICT competencies; the probable reason might be that B.Ed. curriculum has been designed, modified and revised over the years at regular intervals with sole aim and objective of developing effective teaching skills at the fullest among the student-teachers and ICT was incorporated in the B. Ed syllabus. However, one needs to be updated and upgraded frequently with the latest software. To enhance education through ICT it requires clear and specific objective, targets and resources for achieving the purpose. Educational planners, curriculum developer, curriculum coordinator, educational administrators, academic directors, policy planners and concerned authorities must analyse the present state of the educational system, institutional arrangements and practices and identify hindrances relating to infrastructure, finance, curriculum and pedagogy and capacity building. Teachers must take into account the potentials of various ICT when they are implemented in various contexts, for various reasons, and their limitations within the nation. It is important to take into account the finest practices used by other states or nations for integrating and upgrading technology. Obsessively focused on meeting standards, teaching from scripted curriculum, and meeting test benchmarks would not prepare student teachers to acquire the necessary skills required to be a productive and efficient teacher unless intentional instruction was designed through the implementation of realistic life skills, social kills, and ICT lessons.

Pre-service teacher curricula should be focused at enhancing the social intelligence, life skills, and ICT competencies of each student teacher.

RECOMMENDATIONS

On the basis of the present findings, the following recommendations are proposed:

1. It is recommended that NCTE in collaboration with NCERT and SCERTs should develop compulsory life skills training course for pre-service teacher trainees so as to enhance communication skills, professional/career skills, interpersonal relationship skills, cooperation and collaboration, leadership skills and management skills, as life skills based education is the means to accredit the minds of the youth in demanding situations such as personal and interpersonal skills. Consequently, adoption of life skills is the only key to excellence. Life skills education involves active participation of the learner while teacher acts as a facilitator and mentor. Therefore, life skills education involves various activities such as oral presentations, delivering unscripted speeches, creative and critical thinking, team building exercises etc.Teachers training institutions should continue to encourage organizing programmes to facilitate communication, interpersonal communication and relationship skills, co-operate with others through classroom discussion, assigning student teachers into groups or pairing student teachers who have similar interests for project work and other collaborative activities to encourage teamwork in the classroom, seminar etc. When it comes to education and learning, the individual learner becomes the most important element for the success at every level.
2. Life skill-based education should have a proper position in the academic programme. It should not be viewed as an extracurricular activity or a kind of inactive moral instruction. The school needs to implement a learner-centric pedagogy and numerous learning chances. To create a school atmosphere that supports life-skills-based education, teachers should develop and incorporate life skills into their classroom practices. They should also work to surmount implementation challenges.

3. It is recommended that sufficient amount of multimedia-based teaching and web-based project works should be included in the teacher education curriculum. It is recommended that student teacher should have a project of preparing at least 15 lesson plans by integrating the various technologies. This will make it possible for pre-service

teachers to acquire these competencies during their training period. In the present digital era, our classroom environment has changed from one way learning to a two-way learning process where both teachers and students actively participate. Our present education system has gradually become student centric. Children in the present digital era are advanced learners and since education is based on child centric education, it is imperative for all teachers to get themselves prepared and to copewith different ICT tools so as to make the classroom teaching-learning interesting.

4. It is recommended that crash course especially in ICT application could be conducted to improve the attitude of B. Ed trainees, as not all student teachers who have content knowledge of ICT could be effective in practical. Experimenting with technology through hands-on experience can help develop student ICT skills, therefore, student teachers must try to make maximum utilization of the ICT facilities available in their institutions. There are so many options for edtech tools such as screencastify, wakelet, remind, google workspace (docs, slides, forms, lens, drawing), headspace, ever note, duolingo, dotstroming, booklet, splashlearnetcwhich a teacher can use in and out of the classroom for effective teaching and learning. Making use of technology in education creates an easy-to-manage learning environment where the delivery of information is so much smoother and the learning easier. Therefore, student teachers who are the future teachers must have a good digital skill by updating themselves with new technologies. Teachers require extensive, on-going exposure to ICTs to be able to evaluate and select the most appropriate resources. In the B. Ed syllabus ICT was incorporated but beyond theory student teachers must practice the skills they learnt theoretically and continue to use them, if we do not practice continuously we would not be able to keep up with the newest developments in the technology industry we may even forget how to do basic things. There are some resources for increasing digital skills to educate themselves at home such as websites with free online courses such as Common sense education, Techboomers, GCFLearn,org., DigitalLearn,org etc. Keeping up with current tech trends is important in maintaining digital skills over time, there are numerous websites such as DigitalTrends.com, Lifewire.com,Cnet.com, Thewirecutter.com and others which are useful and convenient to keep us up with the latest tech.
5. It is highly recommended that teachers training institutions should continue to encourage organizing programmes to facilitate communication, interpersonal communication and relationship skills, co-operate with others through classroom

discussions, assigning student teachers into groups or pairing-student teachers who have similar interests for project works and other collaborative activities to encourage teamwork, goal setting and responsibility in the classroom. Teachers can also carve out a time in their curriculum to directly teach the communication skills, interpersonal relationship skills, conflict resolution, empathy, co-operation skills to their student teachers. Research based programmes such as Second Step, provide teachers and institutions with explicit lessons for social development.

6. In order to promote interpersonal skills, verbal and nonverbal communication skills, sensitivity, teamwork and cooperation skills, it is advised that schools regularly arrange lectures and workshops for student instructors. Assuring that everyone has a chance to participate in discussion forums helps develop leadership abilities, interpersonal skills, problem-solving abilities, the ability to give and receive constructive criticism, the ability to read social cues, the ability to understand humour, the ability to actively listen, the ability to be assertive, the ability to deal effectively with conflict, and the ability to cooperate and collaborate. The more we try to engage and speak with others, the more we will learn about the knack of understanding and talking, and the more our interpersonal abilities, sensitivity, our ability to communicate effectively will advance.

7. It is advised that the electricity grid be improved, or photovoltaic power could be used instead. Government officials from the public and private sectors should work together to provide and maintain technology in schools that educate teachers. At all educational levels, particularly in the B. Ed., computer and living skills instruction ought to be required. Pre-service teachers will be able to pick up these skills during their training time due to this.

8. Sufficient funding must be raised for the improvement of Computer skills. At the central, regional, and municipal levels of teacher education institutions, trainees' self-esteem and instructing proficiency must be evaluated.

SUGGESTIONS FOR FURTHER RESEARCH

The significance of life skills, social intelligence, and digital abilities has received considerable discussion. Despite the abundance of studies, only one research project of

Mizoram has been carried out in addition to this one. On the following subjects, there are still lots of study voids:

1. The effects of life skills training on the social skills of Mizoram pre-service and in-service student teachers can be further investigated through an experimental study.

2. A study of a systematic review on different age-specific life skills education: Prospects and Opportunities.

3. Studies on teaching competency, self-esteem, and Computer abilities may be expanded to other educational levels. Examples include the intermediate and higher secondary levels at the local and state levels.

4. The focus of the current research was strictly on gender. However, additional study can be done on other demographic variables like location, wealth, parental schooling, profession, religion, and race.

5. A cross sectional study on the development of life skills programme and its impact among the teachers, parents, stakeholders, policy makers, administrators can also be taken up for further study.

6. Perception towards life skills and its impact on the lifestyle of Mizo adolescents can be taken or further research

7. ICT infrastructure in teacher education institutions of Mizoram: A study on its access and usage.

8. Impact of digital skills on teaching learning and academic performance of student teachers of Mizoram.

9. Effects of life skills on social intelligence and ICT competencies of student teachers with regard to their gender can be taken up on a larger scale covering more states.

10. Use of ICT by teacher educators in DIETs, CTEs and IASEs: An analytical study.

11. A study on the effectiveness of Media and ICT integration in schools and colleges.

13. Relationship between spiritual intelligence and socio-emotional intelligence among pre-service and in-service student teachers of Mizoram.

14. Social intelligence and the biology of leadership: A randomized study of student teachers of Mizoram.

15. Future studies for example, social intelligence and its effectiveness on Leadership Building among student teachers.

16. Are life skills a mediator of Social Intelligence? A critical review and in-depth exploration.

17. To investigate in larger samples of different age groups whether Life Skills Education is a key to success.

18. To further explore qualitatively the effect of life skills on the problem solving ability and decision making skills.

19. To explore ways of promoting healthy lifestyle and life orientation through life skills among adolescents.

20. A study of social intelligence and decoding skills in non verbal communication

21. A multi trait-multi method study of academic and social intelligence in teacher trainees

22. An overview of relevance and limitations of ICT in education.

23. Impact of Covid-19 on social intelligence and mental health: A critical review.

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