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Sukkur IBA Journal of Educational Sciences and Technologies (SJEST) is the bi-annual research journal published by Department of Education, Sukkur IBA University, Sindh, Pakistan. SJEST is dedicated to serve as a key resource to provide applied research associated with Educational sciences and technologies at the global scale. This journal publishes manuscripts, which are well written by highlighting new trends in educational sciences, social sciences and emerging technologies.

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The mission of Sukkur IBA University Journal of Educational Sciences and Technologies is to provide a premier interdisciplinary platform to researchers, scientists, educators and educationists from the fields of educational sciences and technologies for the dissemination of innovative solution oriented social and applied research.

Aims & Objectives

Sukkur IBA University Journal of Educational Sciences and Technologies publishes and encourages the submission of on the cutting edge research in the field of Educational sciences and technologies

Research Areas

- Science Education
- Maths Education
- Foundations of Education
- Educational Technologies
- Sports and Health Sciences
- Language, Pedagogy and Policy
- Humanities and Social Sciences
- Teacher Education and Training
- Technical and Vocational Education
- Teacher, School, Community and Society
- History of Education, Science and Technology

Research Themes

The research focused on but not limited to following core research domains:

- Classroom Management or Classroom-centered research
- Counseling and Guidance
- Development of Learning Environment
- Discourse Analysis
- Diversity and Learning
- Diversity and Teaching
- Education and Society
- Educational Management
- Educational Research
- E-Learning and Knowledge Management
- Augmented and Virtual Reality Based Education
- Technical and Vocational Education
- Educational Technologies
- Gamification and Simulation Based Education
- Engineering Education
- Research Design and Methods
- Industrial Education and Sciences
- STEM Education

- Human Resource Management in Education
- Pedagogy and Skill development
- Innovative Pedagogical Models
- Quality Management
- Quality in Teacher Education
- Sustainability of Teacher Education
- Sports and Education
- Teaching and learning
- Teaching of specific skills
- Theories and practice in Education
- Theories and practice in Educational Research
- Time Management and Skill development
- Time Management and Students Performance
- International Education and Development
- Educational Philosophy
- Teacher Education
- Educational leadership
- Science Education
- Mathematics education
- Teaching of English
- ICT in Education
- Inclusive education
- Early childhood education
- Educational psychology
- Educational for sustainable development
- Comparative education
- Distance education
- Curriculum Development
- Assessment in Education
- Elementary and Secondary Education
- Higher education
- School Improvement
- Sciences Education
- Humanities of Social Sciences
- Mathematics Education
- Language and Pedagogy and policy
- Educational Technologies
- Teacher Education and Training
- School Teacher and Community
- Educational Society
- Foundations of Education
- Sports and Health Sciences
- Technical and Vocational Education

Patron's Message

Sukkur IBA University has been imparting education with its core values merit, quality and excellence since its inception. SIBA University has achieved numerous milestones in a very short span of time that hardly any other university has achieved in the history of Pakistan. SIBA University has established its Department of Education (DoE) in 2012 to improve, enhance and maintain the quality education through producing professionally trained teachers and researchers.

The Vision of the DoE is to become reputed teacher education department, which practices international standards of teaching, research, and training with the aim to produce world class teachers and educational managers. The broad goals of DoE are to develop innovative and effective educational models for school improvement, educational leadership and management, curriculum design and assessment and implement them in Pakistani educational contexts and classroom settings in order to get maximum benefits through economic growth and development. The prime purposes of DoE are to build the capacity of teachers and educational institutions to enhance teachers' and teacher educators' professional attitude, to elevate the status and self-esteem through fostering a sense of professionalism, knowledge, competencies, skills, critical thinking, scientific behavior and decision making power.

The SIBA Journal of Educational Sciences and Technologies (SJEST) provides a platform to educational professionals to share their research work. The Journal is multidisciplinary and serves wide areas of educational sciences and technologies. In particularly, this journal promotes researches that are essential for the enhancement of quality of education. SJEST aimed to achieve international repute and high impact research journal in near future.

Prof. Dr. Mir Muhammad Shah
Vice Chancellor and Patron SJEST
Sukkur IBA University

Editorial

Dear Readers,

It's a matter of pleasure to bring you the Volume II, Issue I of **Sukkur IBA University Journal of Educational Sciences and Technologies (SJEST),** a multidisciplinary and interdisciplinary journal. This issue went through the double blind peer-reviewed articles, which address the key issues in the field of educational sciences, and technologies i.e. Early Childhood Care and Education (ECCE) Teachers' Teaching Practices; Decoding Blended Learning through its Historical Development; Effect of Cerium Oxide Nanoparticles; Socio-economic and Cultural Impact of Sufi Shrines; Attitudes of Punjabi Speakers towards their Mother Tongue; and the Examining the Self-Efficacy for Online Learning. The covered areas provide good insights about the researched topics to its readers to understand the phenomena well through learning of its different points of views and direction depending on the latest additions in to the existing literature.

SJEST has an institutional association with the **Department of Education**, **Sukkur IBA University,** which believes in quality of education and research and opening of this journal is an outcome of strong research orientation. In addition, the **SJEST** provides valuable platform for national and international researchers to publish their research articles in order to disseminate their findings with the largest number of audience globally in order to bring scientific and authentic solution of the problems.

On behalf of the **SJEST**, I welcome the submissions for the upcoming issues of the journal and looking forward to receive your valuable feedback for the betterment of the journal.

Dr. Zafarullah Sahito
Editor-in-Chief
SJEST

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Editorial and Advisory Board

Vote of Thanks

We are really thankful to the members of editorial and advisory board for their valuable time, suggestions and initiatives made possible to publish this issue.

We are specially thanking to the following reviewers who spent their time and energies to review the papers in time to publish the Second volume, First issue of SJEST.

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The length of different papers can be ranged as follows:
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Theoretical papers (4000 – 12000)
Review papers (4000 – 20000)

Abstract must begin with a new page. The abstract page should already include the page header (as given in APA Style Guide).
Keywords (max. 10 words) from paper must be listed in abstract. The abstract should be a single paragraph between 150 and 250 words.
For formatting details, please download and follow the APA Style Guide. The completed research papers must be given as per above limits of different papers, excluding all figures, tables, references, and the title and abstract page. Final papers SHOULD NOT exceed the upper limit. In case the paper exceeds the limit the editors reserve the right to suggest for edition and modification.

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Font & Line Spacing: 12 Times New Roman with 1.0 throughout the entire paper

Page Numbering: Number page consecutively in the bottom corner, beginning with title page

Header: In the flush left, use a shortened form of the title as a header.

References
Please follow the APA Style Guide of referencing and references.

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Exploration of Early Childhood Care and Education (ECCE) Teachers' Teaching Practices Utilized in Different Contexts: A literature Review

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Abstract
This literature review is about the exploration of teachers' teaching practices of Early Childhood Care and Education (ECCE) teachers utilized in different context'. The findings of this study are based on literature published between the years 2000 and 2020. This document is established as a current analysis of teaching practices of ECCE teachers. The limitation of this paper is that the majority of the study is based on Australia, UK, France, Germany, Pakistan Australia, and USA which restricts the results' worldwide application. The results are presented in seven comprehensive themes; Early Childhood Care and Education (ECCE), Importance of Early Childhood Care and Education, Global status of Early Childhood Care and Education, Challenges in Early Childhood Care and Education, strengthening in Early Childhood Care and Education, best teaching practices in Early Childhood Care and Education and teaching practices utilized by ECCE teachers in different contexts. At the root, all of these themes reveal the practices of ECCE teachers in different context. This study is directly linked to policymakers, educationist, government leaders, community members, researchers and parents who are interested to make early childhood education more effective and appropriate. However, from this literature review it is found that ECCE teachers are not much practicing the effective teaching practices in their classrooms just as; collaborative activity, interactive activity, Hands-on or project based activities. Even it is also found that in many contexts in ECCE physical and social environment was not much conducive for children in order to make their learning effective.

Keywords: *Early childhood education, ECCE teaching practices, 21st teaching practices in ECCE*

1. Introduction

Early Childhood Education and the teaching Practices many researchers have characterized the twenty-first century as an era of educational transformation. Each child is entitled to a high-quality early childhood education (Nanney et al., 2017). Globally people are appreciating these rights, educational institutes compelled to provide learning in a high-quality pedagogical setting. It is critical to reflect on our early childhood

teaching practices in order to improve pedagogy (Morgan, 2020). We promote the benefits of learning rather than a one-size-fits-all technique when we challenge the purpose of school and investigate early childhood teaching practices. Furthermore, early childhood education has historical origins that may be traced back to Martin Luther's period in the 1500s. Since then, multiple teaching theorists and established various approaches to early childhood education, all aiming to help children develop successfully (Tandon et al., 2017). The constantly evolving in teaching approaches, strategies, and pedagogies changed the meaning and philosophy of education. In addition to this, the transformation in educational practices and tools over the last fifteen years has been genuinely astonishing. Constructivism, sociocultural theory, attachment theory, and other theoretical frameworks have improved how we approach children's learning and development (Burchinal et al., 2015). Discovery learning, customized learning, creative thinking, hands-on experiences, and child-centered methods have replaced traditional and teacher-centered techniques (Tandon et al., 2017). The international educational community's recent modifications in various early childhood curriculums have underlined the need to provide learning settings that effectively suit children's needs (Gettinger, 2003). Furthermore, despite the rapid progress of ECCE and Because of the shift in educational focus to children's needs, abilities, and motivation, some traditional and global criteria must be met for an early childhood environment to be classed as qualitative. According to Harms, Clifford, and Cryer (2005), we must address three essential requirements that all children have in order to give quality of life care and education: (a) safeguarding one's health and safety, (b) fostering positive relationships and a pleasant classroom climate, and (c) providing opportunities for stimulation and experiential learning. Furthermore, 193 countries have formally adopted the Sustainable Development Goals. Goal 4.2 of the Sustainable Development Goals focuses on providing quality and equitable ECCE services to all children so that they can grow holistically (Raiker et al., 2019). Teachers must, adopt holistic education in early grades in order to develop pupils holistically (intellectual, emotional, physical, and social). As holistic teaching entails engaging students in a variety of subjects in order to provide them with relevant learning opportunities. Furthermore, students participate actively in experimental learning by solving real-life challenges in their environment (Cevik & Ata, 2019). Furthermore, utilizing best practices in the ECCE classroom is advantageous for kids with attention deficit disorder as well as slow learners, as these techniques assist them holistically. As a result, a variety of directions and a mix of teaching techniques can help to reach all pupils in a class, not just a few who respond well to one teaching style (Sanchez et al., 2020).

Moreover, Physical, gross motor, fine motor, cognitive, verbal, and social-emotional skills are among the milestones to be completed at the ECCE level, according to a study by Okewole et al., (2015) educators and researchers are combining diverse pedagogical tactics based on a combination of best practices to enable each kid to fulfil those milestones while also providing them with a strong academic foundation and the social-emotional skills they require. While there are certain universally agreed requirements for good quality ECCE, according to different studies before being implemented in any best practices in schools these practices must be contextualized and localized (Cobanoglu, 2011). There are five great teaching approaches that are widely regarded around the

world. The first is the Reggio-Emilia teaching approach, which focuses on pupils in preschool and elementary school. It's a student-centered approach that emphasizes experience and relationship-based learning (Turrner & Wilson, 2009). The Montessori teaching approach is the second method, which is widely adopted by international schools all over the world. It follows the same student-centered approach as the Reggio Emilia method. Montessori believed that students should lead teachers, therefore each activity in the Montessori early childhood education programmer is tailored to the child's specific needs and interests (Isaacs, 2018). The third method is founded on the three main principles of the Waldorf Steiner system: thinking, feeling, and acting. The curriculum encourages young children aged 0 to 7 to learn via play. The classroom is set up to engage the child's senses, as this is the best way to teach toddlers. The learning activities are intended to nurture a child's imagination, social skills, and intellectual curiosity about a particular topic. (Hallam, Egan & Kirkham, 2016). The Bank Street technique, like the majority of the other strategies, focuses on children's growth. Children learn via experience in an interdisciplinary and collaborative context, and the cognitive development and emotions of students have a significant impact on teaching. Children develop in a variety of ways and at various periods. Teachers that utilize this method are aware of such developmental transitions and adjust their teaching methods accordingly (Niemeyer, 2009). Apart from these approaches there are number of teaching practices which can be considered as best practices and teacher can utilize in ECCE classroom for development of students. So the aim of this paper is to explore different best teaching practices in different context.

1.1. Problem Statement

Globally, 250 million children are unable to meet their growth potential in the first 5 years of their lives, due to a complex set of risk factors and insufficient access to early intervention to Low- and middle-income countries' children. Hence, according to Global Innovative Index 2018 most of the low economic countries provide least quality education to their nation (Khan, 2018). According to study of Ahmad, (2011) poverty is the biggest obstacle in many less developed countries and poverty create hindrance to in meeting the needs of children and promoting children's rights including early childhood education According to Asian Development Bank, (2000) Traditional education lessens early health and nutrition of young children that may hinder the learning, which affects the memory, reasoning and achievement. Traditional schooling has long-term negative economic effects on employment, labor force participation, and incomes. Children's brain growth at the age of three cannot happen with regular education. Which cannot be an appropriate stimulating learning environment on the other hand ECCE can increase the physical size of the brain itself. Because of the above education system and its issues, many counties paid attention to resolving the matter through the introduction of ECCE (Arshad & Zamir, 2018). However, due to a variety of circumstances, including a lack of skilled teachers, inadequate resources, and a lack of knowledge about the value of the educational experience, the quality of ECCE remains an issue in many nations (Ahmad, 2011). Similarly, Hunzai, (2009) explored some issues which create hindrance to maintain quality of ECCE such as lack of trained, least qualified and less experienced teachers have historically influenced the quality of ECCE in Pakistan. Likewise, the study of UNICEF (2005) explored that poor teacher retention and lack of teacher training is

creating hindrance in holistic development of students. Moreover, there is no attention paid to children' physical, social, emotional, or cognitive requirements in public schools; there are no qualified ECE teachers accessible; and public sector organizations do not pursue parents to make them aware of the need of ECE. (Ahmad, Anjum & Rehman, 2015). However, the study of Younas, et al, M., (2019), Highlighted one of the major issues, in different counties is, most teachers follow traditional teaching methods for all, especially in ECCE classes, which cannot meet individual needs. However, Bowker, (2020) highlighted that young children need different teaching strategies and activities for their holistic development. Furthermore, 193 countries have formally adopted the Sustainable Development Goals. Goal 4.2 of the Sustainable Development Goals focuses on providing quality and equitable ECCE services to all children so that they can grow holistically (Raiker et al., 2019). Holistic development of children can be possible if teachers use best practices, including various teaching learning resources, material and assessment practices (Flaherty, 2019). Therefore, the study of Beery and Magnton, (2021) revealed that the quality of the ECE program depends on the practices of ECCE teachers, because these educators are building blocks for child development, they help to establish the foundation of education and support to develop variety of essential skills of students. Hence, the aim of this research is to explore teachers' teaching practices of ECCE teachers Utilized in different context.

2. Research Methodology

2.1. Process of Study and Literature Review

This literature review has been done by using these key words like Early childhood care and education, teaching practices of ECCE, Different teaching pedagogies of ECCE, Approaches of ECCE, strategies of ECCE in different context and 21st century pedagogy of ECCE on Research Gate databases, Taylor & Francis, Semantic Scholars, Wiley Online Library, Google Scholar, ProQuest, BERA, Scholar Research Library, Elsevier, Springer, Google, Eric and Emerald. Through searching these databases, the 190 articles, 12 theses, 10 books, and 24 reports were discovered. Furthermore, all 120 studies were chosen based on the nature of the topic and their ability to completely define the subject.

2.2. Selection Process and Criteria for Inclusion

Different reports and thesis has been excluded from this procedure without any kind of intervention the papers, articles and, researches and books were categorized by topic 'exploration of teaching practices of ECCE teachers utilized in different context'. The three cycles were used to analyses the articles, with related articles being sorted from others for the purposes of the literature review. 22 articles were recruited in the first cycle, 4 books and 12 additional articles were removed in the second, and only nine items were eliminated in the third. Furthermore, articles were chosen based on a number of recurring terms such as EECE teachers, Different teaching pedagogies of ECCE ICT integration in ECCE etc. to turn into (n = 109). All research or papers were found in different continents based on their data collection such as South America, North America, Europe, Africa Australia and Asia. All studies or articles were found according to their conduction of data in different continent such as Asia, Africa, Europe, Australia, north America and, South America. In addition, according on the topic and nature of the research, all the papers were classified into seven main themes. Articles were organized by the most recent year of publication in order to reduce the quantity of articles and make the review process

more efficient. Table 1 lists the recognized themes from all of the research analyzed, as well as the number of publications. Early Childhood Care and Education (ECCE), Importance of Early Childhood Care and Education, Global status of Early Childhood Care and Education, Challenges in Early Childhood Care and Education, strengthening in Early Childhood Care and Education, best teaching practices in Early Childhood Care and Education and teaching practices utilized by ECCE teachers in different contexts.

Table.1: Division of Articles as per Themes and Area of Study

S.No	Themes	Articles
1	Early Childhood Care and Education (ECCE),	04
2	Importance of Early Childhood Care and Education,	04
3	Global status of Early Childhood Care and Education,	05
4	Challenges in Early Childhood Care and Education,	05
5	Reinforcement in Early Childhood Care and Education	06
6	Best teaching practices in Early Childhood Care and Education	08
7	Teaching practices utilized by ECCE teachers in different contexts.	10
	Total	45

3. Results and Discussions

Eight themes were generated through regourous process.

3.1. Early Childhood Care and Education

Early childhood care and education is the years between birth to age of eight and a period of rapid development of brain. Moreover, at this age Children learn more from their surroundings and the people around there (UNESCO, 2021). Besides this, Early Childhood care and education (ECCE) is not just the preparation of children for primary Education but its main purpose is to develop the children holistically (Cognitive, emotional, physical and social) in order to make them lifelong learner and wellbeing (Count, 2005). Resultantly, Rao (2010) says that ECCE develops the strong, caring, problem-solver, creative, innovator and responsible future citizens. However, through successful early childhood care and education a financially strong country develop that promote the gender equality and develop human resources. According to the (UNESCO, 2021) UNESCO's approach fourth sustainable development goal aims to provide quality Early Childhood Care and Education for all boys and girls by 2030. Because of the poverty and illiteracy, child labor was highly valued in most of the industries and farms in early time. Then, as time passed, reformers realized that young children are different from adults and require a unique approach. As a result, reformers began to comprehend the process of child growth and development. Furthermore, the different pioneers like Froebel and the McMillan sisters began working on it to build early childhood programs. The ECE, on the other hand, evolved in most nations after the Second World War. Following WWII, in the 1950s, the Kindergarten program was established as part of the educational policy to educate and care for young children (Reetu, Renu & Adarsh, 2017). The structured classrooms with instructor-led, face-to-face learning are considered a classic technique. It usually involves more interaction between the teacher and the

students. The physical presence of the teachers also makes it more regulated than online ones. The boards, teaching models and different types of graphs, diagrams and charts were the charms added to a classic classroom setting by a teacher which improve its efficiency (Duplass, 1996). In traditional teaching, teachers and students develop closer bonding and ties which can further motivate the students (Malik & Akkaya, 2021). It also improves students' social skills as they have to live and study with their fellows and work in groups.

Table.2: Early Childhood Care and Education

Topic	Author	Year	Methodology	Variable
Early Childhood Care and Education	UNESCO	2021	Web Article	Early Childhood Care and Education
Getting ready: Findings from the National School Readiness Indicators Initiative: a 17 State Partnership.	Count, K	2005	Document review	National school Readiness
Preschool quality and the development of children from economically disadvantaged families in India	Nirmala Rao	2010	Qualitative study	Preschool quality and development
Quality early childhood care and education in India: Initiatives, practice, challenges and enablers	Chandra Reetu, Gulati Renu and Sharma Adarsh	2017	Review Article	Quality ECCE

3.2. Importance of Early Childhood Care and Education

The cognitive, conative, and affective domains of development of young children are all developed by ECCE instruction. Furthermore, neurologists have shown that a child's brain has a tremendous capacity for development and learning around the age of three. However, when a child is active in an ECCE it is likely to have an impact on their future academic development, employment rate, and societal support (Zada, 2014). Similarly, Ahmad (2011) anticipated that by investing on the quality ECCE programs in result more dollars being repaid. Along with this, Parents in addition to the school play a vital part in the child's development and nurturing. ECCE program pays special attention to each child development in order to eliminate learning barriers, boost memory and improve their problem-solving, intellectual, rational, and critical skills, and improve achievement ratios. According to the West (2003) at the young age children remember the events or learning that happens with them in pre-fatal period. Because children at this age get more attention and care from their parents, caregivers, siblings, and teachers through this they become aware about how the child learns. Furthermore, the fundamental goal of ECCE program is to provoke a child's complete personality by focusing on their holistic development (socially, cognitively, emotionally, physically, and morally). Emotional

intelligence is also important because academic and career success leads due to emotional intelligence. For example, they can gain confidence, develop their interests, become more purposeful, learn to manage themselves, strengthen their social bonds, and improve their communicative, collaborative, and cooperative skills. In addition, to develop the competitive and emotional intelligent students' critical thinking, problem-solving, conflict resolution and language are most important skills (Arshad & Zamir, 2018).

Table. 3: Importance of Early Childhood Care and Education

Topic	Author	Year	Methodology	Variable
Early childhood teacher education in Pakistan: time for action.	Khan Zada	2014	Documented Review	Early Childhood Care and Education
Early childhood education in Pakistan: an international slogan waiting for national attention.	Mohammad Ahmed	2011	Review Article	Early Childhood Care an Education in Pakistan
At the margins: street children in Asia and the Pacific.	West, Andrew.	2003	Report	Street children
Situational Analysis of Early Childhood Education in Pakistan: Challenges and Solutions.	Mahek Arshad Shazia Zamir	2018	Qualitative study	Challenges and Solutions regarding ECCE

3.3. Global Status of ECCE

In today's world ECCE programs are becoming more popular across the world. When teachers, parents, family members, and communities are eagerly involved in children's learning the quality of ECCE programs is more enrich and successful. Moreover, Children at three years old are involved formally and informally in ECCE education. For example, in Europe, more than half of four-year-old children attend ECCE centers, while 90% of three years old children go to ECCE schools in Belgium, France, and Italy (Myers, 2005). However, in Australia, 83.4 percent of four-year-old children are admitted to pre-primary schools. The rapid growth of ECCE programs on the other hand prompted policymakers and practitioners to examine policies, create adaptable curricula, train instructors, and promote quality education (Tilbury, 2006). Furthermore, it has also been established that the low crime rate, economic status and employment rate is linked to the high quality of ECCE programs. Several research initiatives and programs has been launched in attempt to improve ECCE program in various nations. For instance, in the United States, the Head program was established in the 1960s and continued until 1987 to promote ECCE development programs. However, the goal of this program was to encourage the young children to engage in task-oriented activities. Secondly, a report was developed in the United Kingdom in the 1990s, titled as "Starting with quality" was developed as a result of the importance of early education realized by

government (Lambert & Clyde, 2000). According to, Ahmad (2011) from 1993 to 1997, many research studies were done to improve the quality of early childhood education. The "Sue start project" was likely launched in 1998 with the goal of developing healthy young children through collaboration with partners in order to meet the needs of children and their families. In many nations, however, there is a lack of understanding of ECCE programs, the requirement for a successful ECCE curriculum, and the importance of government policies and frameworks for ECCE. However, poverty and a lack of public-private partnerships are the reasons for the limited ECCE program. For example, children from the wealthiest families are allowed to go private ECCE schools, while disadvantaged children are unable to get the access of pre-school education (Sylva, Melhuish, Sammons, Siraj-Blatchford, Taggart & Elliot, 2003).

Table. 4: Global Status of ECCE

Topic	Author	Year	Methodology	Variable
In search of quality in programs of early childhood care and education (ECCE	Robert G. Myers	2004	Report paper	Quality in ECCE programs
Accountability via performance measurement: The case of child protection services.	Clare Tilbury	2006	Quantitative research	Child protection service
Re thinking early childhood theory and practice	E. Beverley Lambert, Margaret Clyde	2000	Review paper	Early Childhood Education
The effective provision of pre-school education (EPPE) project: Findings from the pre-school period	Kathy Sylva, Edward Melhuish, Pam Sammons, Iram Siraj-Blatchford, Brenda Taggart and Karen Elliot	2003	Qualitative research	Effective Pre-school
Early childhood education in Pakistan: an international slogan waiting for national attention.	Mohammad Ahmed	2011	Review Article	Early Childhood Care an Education in Pakistan

3.4. Challenges faced by ECCE Teachers

According to, Pearson, Hendry, Rao, Aboud, Horton, Siraj and Miyahara, (2017) there are multiple challenges that are barrier for quality ECCE education; lack of strong education plan, limited effective design and implementation of ECCE curricula, lack of qualified teachers and lack of engagement of parents. First lack of *strong education planning* challenge says that a first set of issues concerns ECCE system planning, which includes curriculum development, resource management, and service execution and

monitoring. Because these systems are not more developed in many countries therefore effective curriculum, policies and resources are not much focused. Second challenge is *lack of effective design and implementation of ECCE curricula (*Reetu et al., 2017). The design and execution of curriculum and teaching and learning methods are a second set of issues. Global commodities, such as knowledge transfer, sharing of best practices, and creative methods, have been requested by developing nation partners in order to develop and design an effective early childhood care and education curriculum. For many countries, determining the quality and relevance of a curriculum is also difficult because majority of countries are not implementing an evidence-based curriculum. However, the reason lack of expertise and funding at the policy level to conduct assessments and collect reliable data. Moreover, Dixit, Sakalle, Patel, Taneja and Chourasiya, (2010) explored the third challenge that is *lack of qualified ECCE teachers* as according to experts the professionalization of the ECCE is a critical aspect in achieving quality outcomes and to assuring quality service.

Table. 5: Challenges Faced by ECCE Teachers

Topic	Author	Year	Methodology	Variable
Reaching expert consensus on training different cadres in delivering early childhood development: technical report.	Pearson, E., Hendry, H., Rao, N., Aboud, F., Horton, C., Siraj, I., Raikes, A. & Miyahara, J.	2017	Technical Report	Early Childhood Development
Quality early childhood care and education in India: Initiatives, practice, challenges and enablers	Chandra Reetu, Gulati Renu and Sharma Adarsh	2017	Review Article	Quality ECCE
Evaluation of functioning of ICDS project areas under Indore and Ujjain divisions of the state of Madhya Pradesh.	Sanjay Dixit, Salil Sakalle, G.S. Patel and Gunjan Taneja	2010	Review Paper	Evaluation of ICDS projects
Quality and diversity in early childhood education: A view from Andhra Pradesh, Assam and Rajasthan	Venita Kaul, Aparajita Bhargarh Chaudhary and Sandeep Sharma	2014	Qualitative research report	Early Childhood Education quality and diversity
Report of the Social Audit of the ICDS Programmed in the District of Anantapur in the State of Andhra Pradesh'	KR Venugopa	2009	Research report	Early Childhood Education

A literature review conducted by the United Kingdom's Department for International Development (DFID) in 2017 identified numerous characteristics of the ECCE teachers. For instance; they are in poor supply even they have a low social status with no clear career path, along with this they teach for low pay and have no monitoring or evaluation process. Besides this ECCE teachers who have received specific training resultantly they provide exciting, responsive, and supportive interactions to children that lead towards the better learning and outcomes. Specialized education professionals with a degree or diploma in early education and noncertified paraprofessionals who may or may not have completed secondary school are the two basic types of early education teachers (Kaul, Chaudhary & Sharma, 2014).

Lastly the *lack of engagement of parents in schools* leads the students towards the pre-primary education. Engaging families in ECCE services is a fourth set of issues. Parents and caregivers mostly discourage their children to participate in Early Childhood education due to cultural conventions. On the other hand, working parents give more demands to their services and ignore the children education. Because they do not get time to focus on their children education. However, families are only the factor that obviously prefer a unified approach such as; health, nutrition, education, and child safety rather than segmented approaches. however, it is also observed that when children just learn in school but not through the experiences like from homes, surrounding and community in results they learn less as when they miss the engaging opportunity (Venugopal, 2009).

3.5. Reinforcement in ECCE Education

According to, (World Health Organization, 2019) in order to strengthen or fill the gaps following are areas of improvement in ECCE education. Transferring of knowledge and peer exchange improve the national and regional capacity in order to adapt the assessment tools and curriculum models for early childhood and care education. Moreover, the knowledge capacity might be enhanced when teachers are trained by hands-on approach because by doing this teacher can learn the best methods of teaching and dealing with children. Moreover, formal and informal trainings, technical support should be provided to the ECCE teachers in order to support the ECCE teachers (Murphy, Yoshikawa & Wuermli, 2018). Besides this, case study or multiple researches should be conducted on the practices of ECCE teachers and training in order to know the best practices and improve their teaching practices. In addition, parents and community involvement should be encouraged so that children can also learn from out of the school. For instance, parents should engage in Management meetings, policy making meetings, teachers training in regards to deal their children in an effective way and promote quality ECCE education. However, these areas might be qualitative and effective for quality ECCE education (Hatipoglu, Mohammed, Hendricks & Buch, 2018).

Table. 6: Reinforcement in ECCE Education

Topic	Author	Year	Methodology	Variable
Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.	World Health Organization	2019	Web Article	Trends in maternal mortality
Implementation research for early childhood development programming in humanitarian contexts.	Katie Maeve Murphy, Hirokazu Yoshikawa, Alice J. Wuermli	2018	Review Paper	Early Childhood care and Education development
Supporting the Early Childhood Workforce at Scale: Community Health Workers In South Africa	Hatipoğlu, K., Mohammed, Z., Hendricks, S., and Buch, E.	2018	Mix method approach	Early Childhood workforce

3.6. Best Teaching Practices in ECCE

There are some preschool teaching practices that provides best point for ECCE educators. For instance; Symbol Labelling, Sound matching, start a garden, involved in science, integrate technology, cooperative learning, Waldorf Steiner method and STEM method. Firstly, *Symbol Labelling* is about to improve the everyday vocabulary by showing them labels and symbols. Because by converting the image into word helps the children in language development (Ball, 2010). It is recommended that the parents to take the pictures of logos found in their communities like; the street signs, automobile logos or clothing labels. In this way, children can bring that pictures in the classroom in which students collaboratively can practice there. Secondly, in *Sound matching* children make the sound that letter make. Similarly, teachers also encourage the children to choose an object that starts with same sound. Besides this, Reetu et al., (2017) argues that this activity engages the students in Hands-On in order to learn better. Thirdly, *start a garden* is a garden may be a fantastic method to teach youngsters about the natural world, whether you have a large outdoor space or simply a pleasant ledge near a window. Moreover, teachers can show the students the plant development process from seed to maturity that helps them to develop motor skills. Besides this, teachers can allow their students to check the plants' developmental process regularly. Other than this in *involved the students in science* teachers' emphasizes the necessity of encouraging kids to engage in science and observation activities using all five senses. For instance, when teachers establish a class garden in which students can feel the material, observe them, taste them and can smell them. Along with this, *integrated technology* is most important activity in which children's 21st century skills (Collaborative, communicative, problem-solver and critical) improve. The Internet has shaped the lives of today's youth. Many of them are more

computer proficient than the adults in charge of their education. Teachers must learn to communicate with these children in their own language and become familiar with the technology that comes so effortlessly to them. Integrating technology involves focusing on students' interests while also improving their technical abilities and expanding their learning opportunities.

Many teachers, eager to stay up with the latest trend, merely go through the integrating technology. However, they will need a thorough comprehension of the tools that are available, as well as significant thought in order to improve learning. Other than this (Chandra, 2021) argues that *cooperative learning* activity is that in which Teacher-centered learning has outlived its usefulness. A student-centered approach is becoming more popular among effective teachers. Cooperative learning increases students' interaction in classroom. In this way, teacher calls the students in group rather than individually that resultantly increases the participation of students. Besides this, children also get interest and put same amount of efforts as the teachers. Similarly, in cooperative classroom teacher's role shift to the facilitator. Resultantly, students get the high grades as a classroom team (Hegde & Cassidy, 2009). The *Waldorf Steiner method* is the second last approach, in which the three guiding principles of the Waldorf Steiner system are thinking, feeling, and acting. The curriculum encourages young children aged 0 to 7 to learn via play. Because this is the best technique to teach youngsters, and the classroom is set up in such a way that the child's senses are stimulated. Resultantly through this method children's imagination, social skills, and intellectual skills are explored Anna Heinrich (2017). Lastly, (Rema Rajiv, 2021) suggested the *STEM method* is interdisciplinary method and a short form of science, technology, engineering and mathematics. However, it is perceived that STEM approach is difficult to practice in ECCE. But it is studied that children are already engage in STEM because these children interact with the natural environment. Along with these children try to develop the new thing in a creative way from their toys. In ECCE the STEM activities are cooking, building blocks or bridges and etc. For instance, teachers can engage students like in cake baking activity in which children can measure, mix and bake. Similarly, in measuring math, in mixing science and in oven technology is used. In this way children can engage in multiple activities in which science, technology, engineering and mathematics subjects can be integrated. However, at the early age children learn more through games, project based and hands-on activities. In this way children language, science, logical, problem solving and creative skills improve.

Table. 7: Best Teaching Practices in ECCE

Topic	Author	Year	Methodology	Variable
Enhancing learning of children from diverse language backgrounds: Mother tongue-based bilingual or multilingual education in early childhood and early primary school years	Jessica Ball	2010	Literature review	Multiple Lingual education
Quality early childhood care and education in India: Initiatives, practice, challenges and enablers	Chandra Reetu, Gulati Renu and Sharma Adarsh	2017	Review Article	Quality ECCE
Preschool teacher quality in India. In Building teacher quality in India: Examining policy frameworks and implementation outcomes.	Alexander W. Wiseman and Preeti Kumar	2021	Review paper	ECCE teachers' quality
Teachers' beliefs and practices regarding developmentally appropriate practices: A study conducted in India	Archana V. Hegde and Deborah J. Cassidy	2009	Qualitative paper	Teachers' beliefs and practices about appropriate practices
7 Teaching Strategies to Consider for Your ECCE Classroom.	Anna Heinrich	2017	Blog article	Strategies of ECCE classrooms
5 preschool teaching methods to improve the quality of early care and education.	Rema Rajiv	2021	Web article	Pre-school teaching strategies

3.7. ECCE Teachers' Teaching Practices Utilized in Different Contexts

The main purpose of this review paper is to explore the current teaching practices utilized in ECCE. However, it is found that in early childhood care and education teachers give the conducive environment (physically and socially). Moreover, the environment is physically safe, enhancement of social skills, nurturing of emotional intelligence and develop them intellectually. Besides this teacher interact the students with multiple resources that produce the interest in students and learn more as compare to teacher-centered classroom (Kaul, Chaudhary & Sharma, 2014). According to the statement, the ECCE site should contains proper site, earth, feat ure, and height. Moreover, it is also researched that Preschool should be as much as feasible, be located in the surrounding of the children. Besides this, the preschool should be positioned away from crowded portions of the site/city, cemeteries, and major traffic

locations in order to the protection of the children (Dhingra & Sharma, 2011). Whereas it is found that in Woldia town for ECCE school site, locality and surrounding does not matter and it highly effects on the children learning. In addition, in ECCE the availability and adequacy of class room space, indoor materials and apparatus are all factors to consider. The use of inside materials and apparatus is critical to the successful application of ECCE. Likely, these resources play a major role in holding the children's courtesy for long period of time.

Moreover, it influences the successful teaching and learning process in order to comprehend and learn better. Every space used by pre-school children have child-sized equipment, such as in furniture; tables and chairs, encourage children to play the games, puzzles, reading, writing and other activities that help the children to learn the new skills. On the other hand, majority of studies argued that in pre-school limited instructional resources are found. Such as; lack of standardized child-sized classroom furniture, lack of cleaned classrooms, ventilated classrooms and books.

Table. 8: ECCE Teachers' Teaching Practices Utilized in Different Contexts

Topic	Author	Year	Methodology	Variable
Quality and diversity in early childhood education: A view from Andhra Pradesh, Assam and Rajasthan	Venita Kaul, Aparajita Bhargarh Chaudhary and Sandeep Sharma	2014	Qualitative research report	Early Childhood Education quality and diversity
Assessment of preschool education component of ICDS scheme in Jammu district.	Rajni Dhingra, Iesha Sharma	2011	Qualitative research paper	Assessment of pre-school education
Quality early childhood care and education in India: Initiatives, practice, challenges and enablers	Chandra Reetu, Gulati Renu and Sharma Adarsh	2017	Review Article	Quality ECCE
Early childhood development in five South Asian countries	Rayginne G.H. Tan, Das, Mohamed, Saeed, Acharya, Noble, Panezai & Jasraj,	2008 and 2016	Literature review	ECCE in five development countries

Moreover, limited space for children rest that leads the students towards the uncomfortable. Besides this, in many schools' pre-primary school curriculum is developed even teachers are also not aware of the ECCE curriculum. Whereas in different ECCE schools' variety of text books like first grade textbook is used. Along with this it is also found that in many schools ECCE teachers were not trained in ECCE teaching.

For instance; some of the teachers were diploma holders in TVET education and some had diploma in ECCE education. Besides this, some teachers were just completed their matriculation and many of the teachers had no any educational qualification (Reetu et al., 2017). Similarly, found that even ECCE managers were not qualified in ECCE management. Resultantly, due to lack of training of teachers and managers ECCE implementation is very poor in different contexts. According to the findings of this study in pre-primary schools the story telling teaching approach more effectively because children love and enjoy the stories. (Das, Mohamed, Saeed, Acharya, Noble, Panezai & Jasraj, 2008; Tan, 2016). However, teachers need to tell stories that can be written or told orally or describe fictitious story. Furthermore, children share a story tale with family at home and/or at school to the teachers through this students' literacy, speaking and listening skills improve. Moreover, when parents are involved in bringing and pick up their children from preschool, offer financial assistance, and monitor their children's interests and academic achievement was proven to be beneficial. However, it is found that a document was analyzed in which a feedback was given by the ECCE teachers and parents in which suggestions and comments were noted down. This activity is very beneficial for both school and children in order to improve the school performance and students' achievement. On the other hand, in an India context it is found that (Reetu et al., 2017) interaction among child to child, child to teacher and child to resources play an important role in quality of ECCE. Moreover, also argued that when teachers interact with the surroundings, environment overall develop the children. In contrary it is also found that in multiple contexts teachers just interact with the whole class on the time of teaching rather than individually. Moreover, due to limited resources and time teachers just interact with the students.

4. Conclusion

The purpose of this literature review is to explore the teaching practices of Early Childhood Care and Education teachers utilized in different contexts. Moreover, multiple theses were generated with the help of literature. For instance, introduction of Early Childhood Care and Education, Importance of ECCE, Global status of ECCE, Challenges in ECCE, Strengthen the condition of ECCE, Best teaching practices in ECCE and lastly the utilization of ECCE teachers teaching practices in different contexts. However, from this literature review it is found that ECCE teachers are not much practicing the effective teaching practices in their classrooms just as; collaborative activity, interactive activity, Hands-on or project based activities. Even it is also found that in many contexts in ECCE physical and social environment was not much conducive for children in order to make their learning effective.

5. References

Ahmad, M. (2011). Early childhood education in Pakistan: an international slogan waiting for national attention. Contemporary Issues in Early Childhood, 12(1), 86-93.

Arshad, M., & Zamir, S. (2018). Situational Analysis of Early Childhood Education in Pakistan: Challenges and Solutions. Journal of Early Childhood Care and Education, 2.

ASER (Organization: New Delhi, India). (2013). Annual Status of Education Report (rural) 2012: Provisional, January 17, 2013. ASER Centre.

Ball, J. (2010). Enhancing learning of children from diverse language backgrounds: Mother tongue-based bilingual or multilingual education in early childhood and early primary school years. Victoria, Canada: Early Childhood Development Intercultural Partnerships, University of Victoria.

Burchinal, M., Magnuson, K., Powell, D., & Hong, S. S. (2015). Early childcare and education.

Çobanoğlu, R. (2011). Teacher self-efficacy and teaching beliefs as predictors of curriculum implementation in early childhood education (Master's thesis, Middle East Technical University).

Count, K. (2005). Getting ready: Findings from the National School Readiness Indicators Initiative: a 17 State Partnership. Prepared by KIDS COUNT Rhode Island. Online: http://www. Getting ready. org.

Das, D., Mohamed, H., Saeed, M. T., Acharya, P., Noble, R., Panezai, S., & Jasraj, S. (2008). Early childhood development in five South Asian countries. World Bank Institute.

Dhingra, R., & Sharma, I. (2011). Assessment of preschool education component of ICDS scheme in Jammu district. Global Journal of Human Social Science, 11(6), 12-18.

Dixit, S., Sakalle, S., Patel, G. S., Taneja, G., & Chourasiya, S. (2010). Evaluation of functioning of ICDS project areas under Indore and Ujjain divisions of the state of Madhya Pradesh. Online Journal of Health and Allied Sciences, 9(1).

Hallam, J., Egan, S., & Kirkham, J. (2016). An investigation into the ways in which art is taught in an English Waldorf Steiner school. Thinking skills and creativity, 19, 136-145.

Hatipoğlu, K., Mohammed, Z., Hendricks, S., & Buch, E. (2018). Supporting the Early Childhood Workforce at Scale: Community Health Workers In South Africa. Washington, DC, Results for Development.

Hegde, A. & Cassidy, D. J. (2009). Teachers' beliefs and practices regarding developmentally appropriate practices: A study conducted in India. Early Child Development and Care, 179(7), 837-847. Retrieved from https://libres.uncg. edu/ir/uncg/f/D_Cassidy_Teachers_2009.pdf

Heinrich, A. (2017). 7 Teaching Strategies to Consider for Your ECCE Classroom. https://www.rasmussen.edu/degrees/education/blog/7-teaching-strategies-for-ece-classroom/

Isaacs, B. (2018). Understanding the Montessori approach: Early years' education in practice. Routledge.

Kaul, V., Chaudhary, A. B., & Sharma, S. (2014). Quality and diversity in early childhood education: A view from Andhra Pradesh, Assam and Rajasthan. Delhi: Unpublished report. Centre for Early Childhood Education and Development, Ambedkar University.

Lambert, B., & Clyde, M. (2000). Re thinking early childhood theory and practice. Social Science Press.

Morgan, H. (2020). Best practices for implementing remote learning during a pandemic. The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 93(3), 135-141.

Murphy, K. M., Yoshikawa, H., & Wuermli, A. J. (2018). Implementation research for early childhood development programming in humanitarian contexts. Annals of the New York Academy of Sciences, 1419(1), 90-101.

Myers, R. G. (2005). In search of quality in programmes of early childhood care and education (ECCE). A paper prepared for the.

Nanney, M. S., LaRowe, T. L., Davey, C., Frost, N., Arcan, C., & O'Meara, J. (2017). Obesity prevention in early child care settings: a bistate (Minnesota and Wisconsin) assessment of best practices, implementation difficulty, and barriers. Health Education & Behavior, 44(1), 23-31.

Niemeyer, J. H. (1965). The Bank Street Readers: Support for movement toward an integrated society. The Reading Teacher, 18(7), 542-545.

Okewole, J. O., Abuovbo, I. O. V., & Abosede, O. O. (2015). An evaluation of the implementation of early childhood education curriculum in Osun State. Journal of education and practice, 6(4), 48-54.

Pearson, E., Hendry, H., Rao, N., Aboud, F., Horton, C., Siraj, I., ... & Miyahara, J. (2017). Reaching expert consensus on training different cadres in delivering early childhood development: technical report.

Rajiv, Reema. (2021). 5 preschool teaching methods to improve the quality of early care and education. https://singapore.globalindianschool.org/blog-detail/5-preschool-teaching-methods-to-improve-the-quality-of-early-care-and-education.

Rao, N. (2010). Preschool quality and the development of children from economically disadvantaged families in India. Early Education and Development, 21(2), 167-185.

Reetu, C., Renu, G., & Adarsh, S. (2017). Quality early childhood care and education in India: Initiatives, practice, challenges and enablers. Asia-Pacific Journal of Research in Early Childhood Education, 11(1), 41-67.

Sanchez-Flack, J. C., Herman, A., Buscemi, J., Kong, A., Bains, A., & Fitzgibbon, M. L. (2020).

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., Taggart, B., & Elliot, K. (2003). The effective provision of pre-school education (EPPE) project: Findings from the pre-school period. London, England: Institute of Education, University of London and SureStart.

Tan, R. G. (2016). Early childhood care and education in five Asian countries. The HEAD Foundation Literature Review: Singapore.

Tandon, P. S., Walters, K. M., Igoe, B. M., Payne, E. C., & Johnson, D. B. (2017). Physical activity practices, policies and environments in Washington state child care settings: results of a statewide survey. Maternal and child health journal, 21(3), 571-582.

Tilbury, C. (2006). Accountability via performance measurement: The case of child protection services. Australian Journal of Public Administration, 65(3), 48-61.

Turner, T., & Wilson, D. G. (2009). Reflections on documentation: A discussion with thought leaders from Reggio Emilia. Theory into Practice, 49(1), 5-13.

UNESCO. (2021). Early Childhood Care and Education. https://en.unesco.org/themes/early-childhood-care-and-education

Venugopal, K. R. (2009). Report of the Social Audit of the ICDS Programme in the District of Anantapur in the State of Andhra Pradesh'.

West, A. (2003). At the margins: street children in Asia and the Pacific.

Wiseman, A. W., & Kumar, P. (Eds.). (2021). Building Teacher Quality in India: Examining Policy Frameworks and Implementation Outcomes. Emerald Group Publishing.

World Health Organization. (2019). Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.

Zada, K. (2014). Early childhood teacher education in Pakistan: time for action. International Journal of Early Years Education, 22(3), 263-270.

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Decoding Blended Learning: Historical Development, Definitions and Components

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Abstract
This review of literature article looks at the background and historical development of blended learning as a concept. Using research questions-based systematic review of literature approach, it critically evaluates different definitions of blended learning proposed by different researchers, and examines how they evolved over the years. Based on the earlier definitions and the current context, the article comes up with a new one. It also views the role and importance of blended learning during Covid-19. Furthermore, it examines different types of blended learning. Finally, it looks at its different components and how they may be used in the teaching-learning process.

Keywords: *blended learning, online education, historical background, review of literature, Covid-19*

1. Introduction

Human beings are one of the most extraordinary creatures of nature. The psychological approach and needs of every human being vary from person to person. Every person has his/her own perceptions and views to observe, analyze and absorb different things. Thus, the learning behavior of every individual also varies. Some feel more comfortable in traditional ways of teaching while others are more excited at the prospect of online and digital learning. As a result, a pedagogical technique that combined the two is considered most suitable for education. This technique is called blended learning.

There are many questions regarding blended learning i.e. what is it, how is it different from traditional and e-learning, how did it evolve, what are different definitions of blended learning, and what are different types of blended learning? This article decodes blended learning by answering the above-mentioned questions. It looks into the concept of blended learning, its historical development, how it has been defined over the years, and its types.

1.1. Research questions

The study is based on the following questions.

1. What are the main concepts, roles, and importance of blended learning?

2. How has the term blended learning been defined over the years?
3. What should be the definition of blended learning in the current context and time?

2. Research Methodology

Snyder (2019) compiled a list of approaches and strategies to conduct the review of literature studies. This article employs a systematic research questions-based approach (Snyder, 2019, p. 334). Based on the research questions, relevant pieces of literature were gather and systemically reviewed. Relevant parts were highlighted, and again critically reviewed and analyzed for this study. In total thirty-four studies were reviewed and analyzed for blended learning, and one for methodology.

3. Blended Learning, its Roles and Importance

In the olden days, education was provided through traditional methods and ways using written materials, writing boards and notebooks, and mostly using face-to-face, oral and written communication techniques. The sleek lean of technology into the teaching-learning process opened up a gateway for new learning theories and pedagogical techniques. Initially, audio and video devices entered the teaching-learning process as new and modern technologies (Mossaab & Rime, 2013)). Within a few decades, computers started to infiltrate the education system with unimaginable impact (Molnar, 1997). Soon they were followed by online and digital technologies (Noreen & Malik, 2020; Malik & Akkaya, 2021). Initially, traditional pedagogies, and technology-based pedagogies as two dimensions of the teaching-learning environment, were always placed in opposite directions. The traditional approach which involved face-to-face interaction between the teacher and student, was considered more suitable for formal teaching; and online learning was thought to be appropriate only for distance learning. However, with the ticking clock, the educationists realized that the two were not opposed to each another, but would supplement each other to exponentially improve the efficiency of the teaching-learning process. This new trend of combining traditional and technology-based pedagogy was called blended learning.

The structured classrooms with instructor-led, face-to-face learning are considered a classic technique. It usually involves more interaction between the teacher and the students. The physical presence of the teachers also makes it more regulated than online ones. The boards, teaching models and different types of graphs, diagrams and charts were the charms added to a classic classroom setting by a teacher which improve its efficiency (Duplass, 1996). In traditional teaching, teachers and students develop closer bonding and ties which can further motivate the students (Malik & Akkaya, 2021). It also improves students' social skills as they have to live and study with their fellows and work in groups.

Despite certain advantages and benefits, traditional pedagogy has many limitations and challenges. A large number of students, limited resources, limited teaching tools, and individual learning differences are some of the main challenges that affect academic performance in traditional learning (Malik & Akkaya, 2021). Time constraints in traditional classrooms make the learning environment stressful. The teacher is to teach the planned content in a restricted time. All types of students are supposed to absorb the content taught within the confined time. Face-to-face interactions are considered ideal in

some situations, but time constrain appear to be a challenge for both teachers and students. This forced the educationists to think about different ways to improve the teaching-learning process.

The introduction of computer-assisted teaching-learning techniques provided solutions to the issues and challenges in traditional teaching-learning methods. Use of video recordings, CDs, and later USBs proved to have many pedagogical, psychological and academic advantages (Caspi, Gorsky, & Privman, 2005). Those comparatively modern techniques solved some of the problems associated with traditional teaching like time, space and pace. Teachers learned new technologies like projectors and different computer-assisted devices to further enhance the teaching-learning process.

Online and digital technologies are evolving around the world rapidly. In the current era of globalization, online and digital technologies have been able to play a vital role in every field of life including the teaching-learning process (Malik, Azmat, & Bashir, 2020; Warner, Malik, & Mohammed, 2021). The distance learning paradigm opened up doors for even more technologies. Learners of all ages, areas and fields benefited from modern teaching technologies and techniques. With the passage of time, ICT and digital technologies became a very important component of the education system (Malik & Noreen, 2020; Malik & Akkaya, 2021).

Blended learning which combines both traditional and online learning, has been recognized as a new pedagogical trend in the teaching-learning process (Osguthorpe et al., 2003). Kintu et al., (2017) said that learner characteristics, design features and learning outcomes are some of the indicators for effective blended learning. Researchers argue that institutions adopting blended learning can keep in mind these indicators to make blended learning more effective and successful. Blended learning has been equally effective in both social and natural sciences. However, disciplines employing blended learning often show homogeneity (Pektas & Gürel, 2014). Technology plays a major role in blended learning, consequently, learning new technologies and techniques is imperative for good and effective blended learning teachers and students.

Different Individuals have different learning styles and needs (Khan, Jahan, & Asif, 2017). Teaching-learning methods that involve multiple technologies, techniques and strategies are likely to be more effective in this regard (Scalise, 2007). Face-to-face interactions have their own advantages as they can have the teacher's physical presence. For example, when teachers need to introduce new topics or conduct physical activities and experiments; their physical presence becomes very important. Sense of attachment and involvement can also play a crucial part in the success and effectiveness of this teaching-learning approach. On the other hand, the online learning approach answers many important teaching-learning issues for distance learners. It especially facilitates those who are not able to be in the traditional learning environment. Many students who belong to remote areas are doing jobs, or lack either permission or access to traditional educational institutions, are greatly benefitting from the online mode of learning (Malik & Akkaya, 2021). It also enables the learners to learn according to their own pace without any external pressures. Limited resources in conventional mode, technological upgrading, faculty accountability, and checking of student learning outcomes required by the higher

education institutions force them to move towards the new models of teaching and learning (Howard et al. 2014).

Garrison and Vaughan (2008) argue that higher education must start delivering its promises of providing effective and comprehensive learning experiences by engaging the students, and addressing the needs of society in the 21st century. Blended learning combines both models thus improving the overall effectiveness of the education process. It increased efficiency and working pace, improves reliability, brings convenience, and opens up new ways for collaboration, creativity, and critical thinking. As such, it is best suited for the needs of modern times and evolving challenges.

In blended learning, learners can get access to, and handle extensive information available on the internet and other digital media. Blended learning can also promote the culture of self-learning which can make the students independent learners. Furthermore, it promotes curiosity, critical thinking, and problem-solving skills in them (Dangwal, 2017). It also develops active and collaborative learning on a bigger and broader platform. It not only improves the teacher-student and student-student interactions, but also brings it to a whole different level (Kaur, 2013). Blended learning thus, develops new skills and approaches amongst the students which not only help them in their academic learning, but also benefit them in their future life.

4. Blended Learning during Covid-19

The current pandemic of Covid-19 further reinforced the role and importance of blended learning (Rachmadtullah et al., 2020; Saboowala & Manghirmalani Mishra, 2021). During Covid-19, online education and blended learning became imperative to ensure that the teaching-learning process did not come to a halt (Dhawan, 2020). Covid-19 changed the mindset of the policymakers, researchers, and practitioners about it, and they started to realize its importance. As a result, it saw exponential growth during this time (Malik, Akkaya, & Jumani, 2022). Now, its practices have become a part of our newly adapted life with social distancing. Initially, many education systems went for a purely online mode of learning, but most of them moved to blended mode as the situation eased, and also as purely online education could not provide the flexibility and accessibility that blended learning can.

5. Historical Evolution and Critical Review

Although, blended learning is not a new concept, and the idea of merging conventional and distance/online education started to be discussed in 1960; the term itself started to echo academic circles quite late. The first recorded instance of the term was used in 1999 when an Atlanta-based computer skill certification and software training business offered "blended learning" to its clients (The Free Library, 2013). Since then, the term has been widely used by policymakers, educationists, researchers and scholars.

Blended learning, also known as hybrid learning, technology-mediated instruction and mixed-mode instruction, has been defined by numerous researchers and scholars since the inception of the term. This part of the article looks into the historical evolution of the term and critically reviews some of the prominent definitions. One of the earlier definitions of blended learning was given by Smith in 2001. According to him, blended

learning was “a method of educating at a distance that uses technology (high-tech, such as television and the Internet or low-tech, such as voice mail or confer.” This definition does not explicitly talk about combining conventional and distance/online methods. It also reveals that blended learning was initially taken as an approach that was primarily meant to be used to facilitate distance learning.

Discroll (2002) defined blended learning in a very broad and multi-dimensional way. According to him, blended learning can take place in four different ways: combining different modes of web-based learning, combining different pedagogical approaches (with or without technology), combining any type of instructional technology with face-to-face learning, and combining learning and work by mixing instructional technology with actual job tasks. As a result, “blended” was not limited to combining online and conventional modes of learning (as described in the third point), but also to combine different technology-based learning strategies, pedagogical approaches, and learning and practices (actual work). It is important to note that currently blended learning is generally taken as combining online/distance and conventional education models.

Singh (2003) viewed blended learning as “a combination of multiple delivery media designed to complement each other and promote meaningful learning. The transition of technology from a luxury to a need has turned the table for individuals”. Although Singh (2003) did mention technology, but mainly blended learning was taken as the "combination of multiple delivery media". That means that according to him, blended learning could be a combination of conventional media or distance education media separately. Combining distance/online and conventional mode does not seem to be compulsory even in this one.

It was in 2004, that the term blended learning started to be exclusively used for combining distance/online and conventional modes of learning. Garrison and Kanuka (2004) defined blended learning in the same way as it is defined these days. According to them, it combines "face-to-face instruction with computer-mediated instruction". Oliver and Trigwell (2005) spoke similarly, saying that blended learning is the method of mixing e-learning with traditional learning, mixing online learning with face-to-face.

Graham (2006), also write about combining face-to-face learning systems and distributed learning systems (using technology). One year later, Bliuc, Goodyear and Ellis (2007) talked about mixing traditional and online teaching methods. It was one of the first occasions that the blending of online and conventional teaching-learning methods was used. Garrison and Vaugan (2008) followed the same line, but added a "thoughtful fusion” of the two teaching-learning methods. Westbrook (2008) also defined blended learning as the combination of the two methods, but added “in a pedagogically and didactically meaningful way” and “continuously supervised by a teacher”. According to Graham (2013), “Blended learning system combines face-to-face instructions with computer-mediated instructions". He further added that blended learning can be contextual according to the institutional culture.

6. A New Definition of Blended Learning

While looking at the aforementioned definitions, and how they evolved over the years, it is clear that initially, the concept of blended learning was too broad and multi-dimensional; but since 2004, it has been used for mixing online and conventional modes of learning. Traditionally, it has been a model based on the conventional mode of learning which incorporates online education with varying degrees; but with the changing times and challenges, blended learning can also be an online mode of learning based model with elements of conventional (face to face) education. Based on all these points, this article defines blended learning in these words. “Blended learning combines conventional (face to face) and online modes of learning for improved teaching-learning experience and better academic progress. It may be based on the conventional mode of learning, incorporating elements of the online mode of learning; or the online mode of learning based one with elements of the conventional mode of learning. The ratio, degree, level and type of the two modes may vary according to the learning objectives, teachers and learners’ needs, and infrastructure-related issues and challenges."

7. Components of Blended Learning

According to Doubet and Carbaugh (2020), there are five components of blended learning: launch/ hook, introduction of new contents or skills, formative assessment or checks for understanding, active processing with peers, and authentic learning experiences. For effective use of blended learning, a teacher should not only keep in mind these five components, but also the learning objectives, infrastructural situation, and the setting. These components and their further details are given below.

7.1. Launch/ Hook

Launch or hook strategies can be used to grab the attention of the students. Some of the techniques for it include the introduction of a new idea, giving any quiz or challenge or asking the students to predict something. Both conventional and online techniques can be used for it.

7.2. Introduction of new content or skills

New content or skills can also be introduced through any of the two modes. In online mode, it may be done through recorded video, live video or PPTs etc. In conventional mode, it may be done directly in the presence of the students, using online or conventional tools and strategies.

7.3. *Formative assessment and checks for understanding*

Formative assessment or check for understanding can also be done through both online and conventional modes. However, doing it through technology (not necessarily online) can make the process and feedback quicker, more efficient and effective.

7.4. Active processing with peers

This process means discussing with peers, analyzing, and then trying to apply the knowledge either independently or with them. It can also be done in both modes. There can be classroom group discussions and activities. Online groups can also be created for the same purpose.

7.5. Authentic learning experiences

It means providing the students with opportunities to do a task that would allow them to apply their knowledge and acquired skills in real-life situations. It may be more beneficial to do these tasks in groups with their peers and/ or mentors so that they would further increase their abilities in teamwork and social skills. Both online and face-to-face methods and strategies can be used for them.

8. Conclusion

Blended learning has been evolving over the years both as a concept and as a term. Interestingly, on one hand, the concept of blended learning has expanded (with the inventions of new technologies, and new innovations and strategies for it); on the other hand, it has become more specific. Whereas earlier it could be mixing of multiple strategies of the same method (e.g. multiple strategies of face-to-face method), or mixing instructional technology with the actual job; now it is taken as the combination of traditional (face-to-face) and online modes of learning.

Blended learning has seen immense and exponential growth, especially since the dawn of 21st century. The current pandemic of Covid-19 has further highlighted its role and importance. It provides flexibility, depth and richness to the teaching-learning process. However, the effectiveness of blended learning very much depends on the selection of the right strategies and tools based on the context, objectives and limitations.

9. REFERENCES

Bliuc, A. M., Goodyear, P., & Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education, 10*(4), 231-244.

Caspi A, Gorsky P, & Privman M. (2005). Viewing comprehension: students' learning preferences and strategies when studying from video. *Instructional Science, 33*(1), 31-47. http://dx.doi.org/10.1007/s11251-004-2576-x

Crawford, R. & Jenkins, L. (2017). Blended learning and team teaching: Adapting pedagogy in response to the changing digital tertiary environment. *Australasian Journal of Educational Technology, 33*(2).

Dangwal, K. L. (2017). Blended learning: An innovative approach. *Universal Journal of Educational Research, 5*(1), 129-136.

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems, 49*(1), 5-22.

Diep, A. N., Zhu, C., Struyven, K., & Blieck, Y. (2017). Who or what contributes to student satisfaction in different blended learning modalities? *British Journal of Educational Technology, 48*(2), 473-489.

Doubet, K. J. & Carbaugh, E. M. (2020). *5 Components of Blended Learning*. https://www.ascd.org/el/articles/5-components-of-blended-learning

Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *E-learning, 1*(4), 1-4.

Duplass, J. A. (1996). Charts, tables, graphs, and diagrams: An approach for social studies teachers *The Social Studies, 87*(1), 32-38.

Garrison D, & Vaugan N. (2008). *Blended Learning in Higher Education.* San Francisco, CA: Jossey-Bass.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The internet and higher education, 7*(2), 95-105.

Graham, C. R. (2006). Blended learning systems. *The handbook of blended learning: Global perspectives, local designs, 1*, 3-21.

Graham, C. R. (2013). Emerging practice and research in blended learning. *Handbook of distance education, 3,* 333-350.

Griffin, D. K., Mitchell, D., & Thompson, S. J. (2009). Podcasting by synchronising Power Point and voice: What are the pedagogical benefits? *Computers & Education. 53*(2), 532-539. http://dx.doi.org/10.1016/j.compedu.2009.03.011

Kaur, M. (2013). Blended learning-its challenges and future. *Procedia-social and behavioral sciences, 93,* 612-617.

Khan, I., Jahan, A., & Asif, F. (2017). Relevance of Differentiated Instruction in English Classrooms: An Exploratory Study in the Saudi Context. *International Research Journal of Human Resources and Social Sciences, 4*(9), 274-294.

Kintu, M. J., Zhu, C., & Kagambe, E. (2017). Blended learning effectiveness: the relationship between student characteristics, design features and outcomes. *International Journal of Educational Technology in Higher Education, 14*(1), 1-20.

Malik, M. A. & Akkaya, B. (2021). Comparing the Academic Motivation of Conventional and Distance Education Students: A Study about a Turkish University. *Sir Syed Journal of Education & Social Research, 4*(2), 341-351. http://dx.doi.org/10.36902/sjesr-vol4-iss2-2021(341-351)

Malik, M. A., Akkaya, B., & Jumani, N. B. (2022). Combating Covid: Exploring Pakistani Universities' Responses to COVID-19. In Malik, M. A., Akkaya, B., & Harper, D. S. (Eds.) *Comparative Research on Educational Policy Responses to the COVID-19 Pandemic: Eastern vs. Western Perspectives,* (pp. 1-16), IGI Global.

Malik, M. A., Azmat, S., & Bashir, S. (2020). Influence of Social Interaction on Workplace Motivation and Efficiency of Instructors: An Exploratory Case Study about an Online University in Pakistan. *International Journal of Distance Education and E- Learning, 5*(2), 1-19.

Molnar, A. R. (1997). Computers in education: A brief history. *T.H.E. Journal: Technological Horizons in Education, 24,* 63-68.

Mossaab, T. & Rime, B. (2013). *The Role of Audio-visual Aids in Improving EFL Learners' Listening Skill: A Case Study of Third Year LMD Students at the University of Biskra.* www.proquest.com

Noreen, S. & Malik, M. A. (2020). Digital Technologies for Learning at Allama Iqbal Open University (AIOU): Investigating Needs and Challenges. *Open Praxis, 12*(1), 39-49. http://dx.doi.org/10.5944/openpraxis.12.1.1016

Oliver, M. & Trigwell, K. (2005). Can blended learning be redeemed? *E-learning and Digital Media, 2*(1), 17-26.

Osguthorpe, R. T. & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *Quarterly review of distance education, 4*(3), 227-233.

Pektas, S. T., & Gurel, M. O. (2014). Blended learning in design education: An analysis of students' experiences within the disciplinary differences framework. *Australasian Journal of Educational Technology, 30*(1).

Rachmadtullah, R., Subandowo, M., Rasmitadila, Humaira, M. A., Aliyyah, R. R., Samsudin, A., & Nurtanto, M. (2020). Use of blended learning with Moodle: Study effectiveness in elementary school teacher education students during the COVID-19 pandemic. *International Journal of Advanced Science and Technology, 29*(7), 3272-3277.

Rooney, J. E. (2003). Knowledge infusion. *Association management, 55*(5), 26-26.

Saboowala, R., & Manghirmalani Mishra, P. (2021). Readiness of In-service Teachers Toward a Blended Learning Approach as a Learning Pedagogy in the Post-COVID19 Era. *Journal of Educational Technology Systems.* https://doi.org/10.1177/00472395211015232

Sarason Y, & Banbury C. (2004) Active Learning Facilitated by Using a Game-Show Format or Who Doesn't Want to be a Millionaire? *Journal of Management Education. 28*(4), 509-518.

Scalise, K. (2007) Differentiated e-Learning: five approaches through instructional technology, *International Journal of Learning Technology*, *3*(2), 169-182. http://dx.doi.org/10.1504/IJLT.2007.014843

Singh, H. (2003). Building effective blended learning programs. *Educational Technology, 43*(6), 51-54.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of business research, 104*, 333-339.

The Free Library. (2013). *Interactive Learning Centers Announces Name Change to EPIC Learning.* The Free Library. https://web.archive.org/web/20160305050237/http:/www.thefreelibrary.com/Interactive+Learning+Centers+Announces+Name+Change+to+EPIC+Learning.-a054024665

Warner, S. C., Malik, M. A., & Mohammed, J. H. (2021). ICT Professional Development Workshops and Classroom Implementation Challenges: Perceptions of Secondary School Teachers in Trinidad and Tobago. *International Journal of Innovation in Teaching and Learning, 7*(1), 1-19.

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Effect of Cerium Oxide Nanoparticles as Antibacterial on Staphylococcus Aureus Bacteria

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Abstract
In this study the antibacterial impact of cerium oxide nanoparticles(CON) particles on staphylococcus aureus bacteria was investigated. Microwave induced technique were used for synthesis of cerium oxide nanoparticles. Synthesized Cerium oxide nanoparticles were characterized by Scanning electron microscope (SEM) and X-ray diffraction (XRD). It was noted that cerium oxide nanoparticles of 18-29 nanometer size were synthesized. XRD and SEM results found that with increasing synthetization time size of cerium oxide nanoparticles were decreased. The size of CON particles depends upon the time of synthetization. It was also found that CON particles antibacterial activity is size dependent. Cerium oxide nanoparticles improved the effectiveness of antibacterial agents in a disc diffusion investigation. With Terivid, Amikin Grasil, velosef, spraxin and ceftriaxone drugs against the staphylococcus aureus bacteria appreciably.

Keywords: *cerium oxide Nano particles (CON), Staphylococcus aureus, Antimicrobial analysis, Nano size, characterization*

1. Introduction

Cerium oxide is a very common rare earth metal oxide also known as ceria or ceric oxide. Cerium oxide nanoparticles is nowadays used as antibacterial agent, oxidation resistant coatings and in oxygen sensors (Chen et al., 2014; Hilaire et al., 2014; Soykal et al., 2015). Cerium oxide nanoparticles have exceptional physical and chemical properties due to their small size, including a high magnetic moment and highly strong complexation reactivity (Hilaire et al., 2014). Cerium oxide nanoparticles are like pale-yellow- white powder and has Face Centered Cubic Crystal structure. Cerium oxide nanoparticles are more stable than rare earth oxides like bismuth dioxide, Thorium dioxide and zirconia.

Because of their hygroscopic nature, cerium oxide nanoparticles absorb some CO2 and moisture from the atmosphere (Sahu et al., 2013). Microwave energy, sol-gel procedures, precipitation, hydrothermal synthesis technique, and emulsion methods are all employed to synthesize Cerium oxide nanoparticles. Microwave method is a simple, quick, and efficient alternative to other traditional methods (Crespo et al., 2012). For the past ten years, cerium oxide has been used as effective antimicrobials. Cerium oxide nanoparticles have recently attracted more attention than the most extensively studied metallic nanoparticles, such as silver, copper, gold, aluminum, and zinc. Cerium oxide nanoparticles are one of the advanced materials created by nanotechnology to solve medicinal and biological issues. When compared to other metal oxides, it was discovered that cerium oxide material had antibacterial activity at low temperatures against a variety of microorganisms. Cerium oxide nanoparticles has been shown to protect against radiotherapy used during cancer treatments and to have very low or no toxicity when present in exhaust emissions.

Staphylococcus aureus, Listeria monocytogenes, pseudomonas, and Escherichia coli are only a few of the bacteria that are toxic to humans and cause diseases in various ways (Negahdary et al., 2012; Odonkor et al., 2011). Staphylococcus aureus is a gram-positive bacterium found primarily in the epidermis and respiratory systems. These bacteria are the most common cause of skin infections (Lin et al., 2011; Panacek et al., 2006). Cerium oxide nanoparticles are used in combination with several medications to prevent staphylococcus aureus germs from growing (Fu et al., 2005). The primary goal of this study is to look at the Cerium oxide nanoparticles as an antibacterial effect on staphylococcus aureus bacteria.

2. Experimental

2.1. Synthesis of Cerium Oxide Nanoparticles

Cerium oxide nanoparticles is synthesized by cerium nitrate $Ce(NO3)3$ and urea CH_4N_2O. Combustion of redox mixtures of urea as a reducing agent and cerium nitrate as an oxidising reactant was used to synthesize Cerium oxide nanoparticles. A four decimal electron weight balance was used to precisely measure 0.30 g of cerium nitrate and 0.15 g of urea. These ingredients were put into a 10 ml test tube and diluted with 5 ml distilled water. Using a sonicator set to 50 hertz, the contents of the test tube were correctly mixed for 5 minutes. The subsequent step was to filter the solution using watts-man filter paper with a 0.5-micron opening. After being transferred to a ceramic plate with a 5 cm diameter, the filtered solution was heated in a domestic type microwave oven. The microwave solution was heated for varying time spans 16 to 20 minutes using a 500 W input power setting. It was noteworthy noticed that a 12-minute microwave heating period is sufficient to produce the precipitates. The precipitates obtained hereinafter are referred as cerium oxide nanoparticles (CON). Despite this finding, the CNO duration was increased to 20 minutes in order to determine the ideal time for the reduction followed by the oxidation reaction necessary to change cerium nitrate into cerium oxide

2.2. Characterization

For characterization of Cerium oxide nanoparticles different techniques were used. For the determination of mineralogy of Cerium oxide nanoparticles X-ray diffraction is used.

For the XRD pattern, all produced nanoparticles samples were scanned from 20 to 80 at 2o/min speed and 40 KV with EVA programme. The surface morphology of cerium oxide nanoparticles was studied using a scanning electron microscope.

2.3. Disc Diffusion Method

The disc diffusion method was used to assess the behaviour of staphylococcus aureus bacteria against antibiotic medicines in the absence and presence of Cerium oxide nanoparticles particles. The media for microbe cultivation was made by mixing 15 g of nutrient agar with 70 ml distilled water. In an autoclave, the solution was heated to 121°C for 20 minutes. After that, a specified amount of Cerium oxide nanoparticles was added to the nutritious agar solution and thoroughly mixed. Following that, equal amounts of nutritional agar solution with or without Cerium oxide nanoparticles were placed onto five petri dishes and allowed to dry for 10 minutes. With the use of a cotton swab, Staphylococcus aureus was placed to dried nutritional agar. In the petri dishes centre, a small disc of 8mm diameter was impregnated with antibiotic drug containing 25 mg. The petri dishes were then incubated for 48 hours at 37°C.

2.4. Zone Inhibition Measurement

Kirby-Bauer chart is used to analyze susceptibility of bacteria to Cerium oxide nanoparticles to measure diameter of zone inhibition by using Vernier caliper. Susceptibility of bacteria may be poor, intermediate or high. The magnitude of zone inhibition listed in Table 1 was used to assess Staphylococcus aureus susceptibility with and without Cerium oxide nanoparticles.

Table 1: Diameter of Zone Inhibition

S. No	Diameter of zone inhibition (mm)	Susceptibility of organism	Explanation
1	0 to 2	Resistant	Bacteria are resistant to specific antibiotics; therefore, the medicine could not effectively restrict their growth.
2	+1 to 3	Intermediate	Bacteria are resistant to specific antibiotics; therefore, the medicine could not effectively restrict their growth.
3	+4	Susceptible	Bacteria are resistant to specific antibiotics, therefore the medicine could not effectively restrict their growth.

3. Results and Discussion

3.1 Cerium Oxide Nanoparticles Phase Analysis

XRD technique was used to analyse the phase analysis of Cerium oxide nanoparticles. The pattern of synthesize nanoparticles at various time intervals is shown in Fig.1. The distinctive peaks of CON particles are shown in Fig 1 at 2 Ɵ =28.60, 34.41, and 48.49. It

was noted that no any peak corresponding to any other phase was developed in the XRD patterns of samples synthesized at 16 min, 18 min and 20 min which meant that pure cerium oxide nanoparticles was developed Peaks grow more pronounced as the synthesis time is increased, as shown in Fig 1.

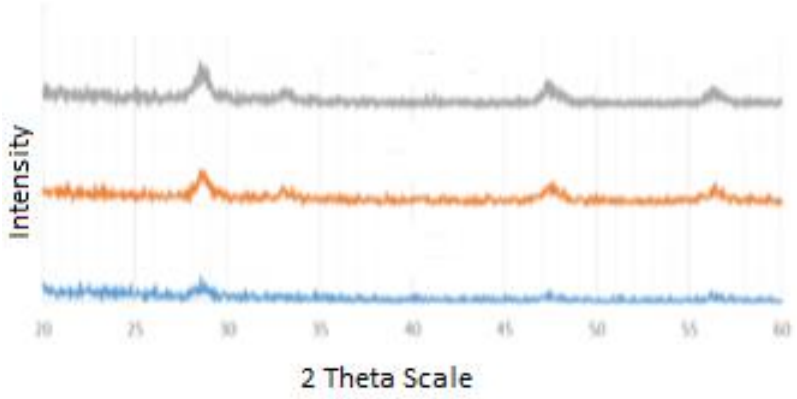

Fig.1: Patterns of Cerium Oxide Nanoparticles on XRD

3.2 Particle Size Analysis

The scherrer equation (dXRD= 0.9/ cos) was used to calculate the particle size of CON particles given in Table 2. As shown in the table, the average crystalline size of nanoparticles spans from 28.91 nm to 17.99 nm. As the synthesis time was increased, the size of the nanoparticles shrank significantly.

Table 2: Particle size analysis of Cerium Oxide Nanoparticles

Time of Synthesis (min)	FWHM (Deg)	2Θ (Deg)	Wavelength (A)	Particle size (nm)
16	0.71	28.60	1.5405	13.65
	0.286	34.41	1.5405	31.58
	0.212	48.49	1.5405	41.50
		Average		**28.91**
18	0.521	28.60	1.5405	5.01
	0.983	34.41	1.5405	8.78
	0.24	48.49	1.5405	32.11
		Average		**24.49**
20	0.776	28.60	1.5405	4.01
	0.546	34.41	1.5405	6.67
	0.497	48.49	1.5405	20.47
		Average		**17.50**

3.3 Morphology OF Cerium Oxide Nanoparticles

Morphology of CON particles was inspected by using scanning electron microscope. SEM images of CON particles are shown in Fig. 3 (i, ii and iii) denotes porous structure.

Figures i to ii show that increasing the synthetization period increases porosity and decreases irregularity in cerium oxide nanoparticles, and Figure iv shows that well-regular spherical particles with a size of 20.47 nm were synthesized.

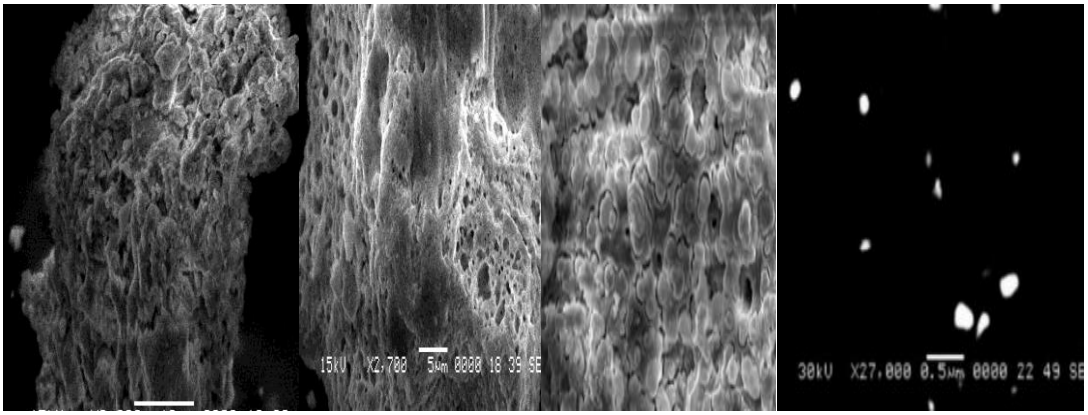

Fig 3. (i) Synthesis 16 min; (ii) Synthesis 18 min; (iii) Synthesis 20 min; (iv) spherical particles

3.4 Cerium Oxide Nanoparticles Antimicrobial Analysis

Cerium oxide nanoparticles antimicrobial effect was evaluated against Staphylococcus aureus bacteria. Nanoparticles produced at 16, 18, and 20 minute intervals were tested for antibacterial activity. Table 3 shows that 10 mg/ml CNO16min in combination with 25 mg antibiotic medicines such as Amikin Grasil, Terivid, Spraxin, Velosef, and ceftriaxone failed to prevent the development of staphylococcus aureus.

Table 3: Cerium Oxide Nanoparticles (CNO) Antimicrobial activity

CNO dose (10mg/ml)	**CNO_{16min}**		**CNO_{18min}**		**CNO_{20min}**	
Antibiotic (25mg/l)	Zone Inhibition (mm)	Resistance/ Susceptibility	Zone Inhibition (mm)	Resistance/ Susceptibility	Zone Inhibition (mm)	Resistance/ Susceptibility
Amikin Grasil	0	Resistance	+2.5	Resistance	+4	Susceptibility
Terivid	0	Resistance	+2.5	Resistance	+5	Susceptibility
Spraxin	0	Resistance	+02	Resistance	+4	Susceptibility
Velosef	0	Resistance	0.5	Resistance	2.5	Resistance
Ceftriaxone	0	Resistance	0	Resistance	0	Resistance

The antimicrobial activity of CNO16min as shown in table 3 suggests that when Amikin Grasil and Terivid medicines were added with CNO18min, the width of zone inhibition was raised to some amount. Furthermore, adding CNO18min to velosef and spraxin antibiotics did not improve their efficacy.

When compared to CNO16min and CNO18min, antimicrobial analysis using CNO20min is extremely promising. Table 3 shows that the addition of CNO20min significantly increased the magnitude of zone inhibition in the cases of Grasil, Terivid, and spraxin. It's worth noting that the inhibition zone did not rise with the addition of CNO20min, but rather reduced, as it did with CNO16min and CNO18min.

4. Conclusion

In this study it is investigated that the antibacterial effect of cerium oxide nanoparticles synthesizing it through the reaction of cerium nitrate and urea. During the synthetization process of cerium oxide, it was observed that the synthetization time plays a vital role in the efficient synthesis of the cerium oxide nanoparticles. Cerium oxide nanoparticles were studied for their antibacterial properties. Synthetization time is important since it reduces the amount of nitrogen-based chemicals in Cerium oxide nanoparticles while also reducing particle size. During the synthesis process, optimal time noted for the synthetization of CON is 20 min. For the characterization of cerium oxide particles, SEM analysis showed that the porosity of CON samples increased as the synthetization duration was increased. Additionally, when the synthetization period increased, rough and irregular particles were transformed into well-regular, spherical-shaped particles. The characterization of cerium oxide nanoparticles was studied using SEM and XRD to identify the presence of various compounds. Antibacterial action of CON evaluated along with antibiotic drugs revealed that NCO20min is more effective as compared to NCO16min and NCO18min. The poor response of NCO16min and NCO18min was due to presence of nitrogen based compounds namely4 N-H and NH3 which worked as nutrient of Staphylococcus aureus microorganism.

5. References

Chen, B.H., Suresh Babu, K.,kumar.A, M., Tsai, T.Y., Kao, T.H., and Stephen Inbaraj, B., (2014). "Cytotoxicity and Antibacterial Activity of Gold-supported Cerium Oxide Nanoparticles", *International Journal of Nanomedicine*, 9(1), 5515-5531.

Crespo, J., García-Barrasa, J., Lopez-de-Luzuriaga, J.M., Monge, M., Olmos, M.E., Saenz, Y., and Torres, C., (2012). "Organometallic Approach to Polymer-protected Antibacterial Silver Nanoparticles: Optimal Nanoparticle Size-Selection for Bacteria Interaction", *Journal of Nanoparticle*, 14(12), 1-13.

Fu, Y.P., and Lin, C.H., (2005). "Preparation of Y2O3-Doped CeO2 Nano powders by Microwave-Induced Combustion Process", *Journal of Alloys and Compounds*, 89(1-2), 165-168.

Hilaire, S., Luo, L., Rechberger, F., Krumeich, F., and Niederberger, M., (2014). "Microwave-Assisted Nonaqueous Synthesis of Doped Ceria Nanoparticles Assembled into Flakes'', *Journal of Nanoparticle*, 640(5), 733-737.

Lin, K.S., and Chowdhury, S., (2010). "Synthesis, Characterization, and Application of 1-D Cerium Oxide Nanomaterials," *International Journal of Molecular Sciences*, 11(9), 3226–3251.

Negahdary, M., Mohseni, G., Fazilati, M., Parsania, S., Rahimi, G., Rad, S., and Rezaei-Zarchi, S., (2012). "The antibacterial Effect of Cerium Oxide Nanoparticles on Staphylococcus Aureus Bacteria," *Annals of Biological Research*, 3(7), 3671–3678.

Odonkor, S.T., and Addo, K.K., (2011). “Bacteria Resistance to Antibiotics: Recent Trends and Challenges”, *International Journal of Biological & Medical Research*, 2(4), 1204–1210.

Panacek, A., Kvítek, L., Prucek, R., Kolar, M., Vecerova, R., Pizurova, N., Sharma, V.K.; Nevecna, T., and Zboril, R., (2006). "Silver Colloid Nanoparticles: Synthesis, Characterization, and Their Antibacterial Activity”, *Journal of Physical Chemistry*, 110(33), 16248–16253.

Sahu, T., Bisht, S.S., Das, K.R., and Kerkar, S., (2013). “Nanoceria: Synthesis and Biomedical Applications”, *Current Nanoscience*, 9(3), 01–06.

Soykal, I.I. Sohn, H., Bayram, B., Gawade, P., Snyder, P.M., Stephen, E.L., Oz, H., and Ozkan, S, U., (2015). "Effect of Microgravity on Synthesis of Nano ceria", *Journal Article of catalysts*, 5(3), 1306–1320.

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Socio-economic and Cultural Impact of Sufi Shrines: A Case Study of Mitthan Kot

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Abstract
Sufi shrines are in plenty in Pakistan having colossal impacts on economic, cultural and social aspects. In the rural areas of Pakistan, poor, uneducated people are largely influenced by Sajjada Nasheen. This study aims to investigate the socio-economic and cultural influences of Sufi shrines in rural areas of Mitthan Kot (Upper Indus Basin). This study follows the qualitative research strategy by employing in-depth interviews from different stakeholders. Thematic analysis has been used to analyze the data. The findings of this study show that the local community is connected to shrines with desperate facts. Many peoples are employed in vicinity of shrines in multiple jobs like garments shops, catering services, transport and boost up the local as well as national economy. In same fashion people also enjoy cultural festivals like Urs and Meela which is a great source of the spiritual happiness and social entertainment. Besides all of this, Various medical facilities like free eye camp, and literacy conventions also play vital role in the betterment of poor people. So there is dire need for further development and regulation in functioning of shrines in order to make the use of giving's at shrines more effectively.

Keywords: *Sufi shrines, Religion, Mitthan Kot, Upper Indus Basin, Meela, Urs, Sajjada Nasheen.*

1. Introduction

Sufism is strongly associated with the history of Islam in the South Asia. Sufism entails specific group of beliefs and practices in Islam which focus on spiritual and personal elements of Islam. There are two main expressions of Sufism in the South Asia. These are Sukr and Sobriety. The followers of Sukr are Sunni Barelvis and the followers of Sobriety are the Sunni Deobandis. The followers of Sufi shrines are mostly the Sunni Barelvis (Epping, 2013). Shrines are deeply linked to culture, social and economic aspects of people. Pirs have power as a religious mediator because their followers think that Pir is the closest to God. Sufi shrines are largely found in Pakistan; mostly people are followers of these shrines. Pir and their Shrines have a powerful role in Pakistan's economic and political development. In the election of 1973 Pir and Shrine secure the victory (Epping, 2013). Ayub Khan (President of Pakistan from 1958 to 1969), Zulfiqar Ali Bhutto (President of Pakistan from 1971 to 1973, and Prime Minister from 1973 to

1979) and General Zia-ul-Haq were the followers of Pirs and it is also well documented that they have become President through the help of Pirs and Shrines (Epping, 2013). In 20th-century shrine system was considered as a source of political authority. The government considers shrines as the center of political power, like in Zulfiqar Ali Bhutto era government officials contribute in shrine rituals. In Pakistan mostly powerful politicians are from Pirs lineage such as Syed Yusuf Raza Gilani, Makhdoom Amin Fahim, and foreign minister Syed Mahmood Qureshi, among others (Epping, 2013).

In case of rural Punjab, many people follow Sufi shrines and they also travel to other saints of Pakistan. These shrines affect their social, economic and cultural lives. They visit shrines to pray and fulfill their needs because they think that the buried saint is closer to Allah. They offer both cash and kind to the shrine that helps the hereditary administrator (Sajjada Nasheen) to gain more power in society (Malik & Mirza, 2015).

A few studies discuss the role of Sufi shrine in urban context and some of the studies discuss in rural context. Mostly studies have focused on shrines influencing in the local context, because as compared to urban people local people are more followers of shrine (Boivin, 2002; Hassan & Kamal, 2010).

The locale of my study is rural area of Mitthan Kot, in which mostly people are illiterate who follow the order of their Pirs. For them Pir is everything and solves all their problems. Some people from this society, who have well-rounded knowledge about religion and are literate, migrated to urban areas; they also have faith on Pir but not like rural people who have firm faith on Pir. Poor villagers visit shrine to fulfill their needs; they have different problems in life like employment, health and children. They give nazrana for shrine in different forms such as cash or animals. From revenues, caretaker of the shrine (Sajjada Nasheen) gets direct benefit, and uses poor people for their own benefit. He plays role in politics due to villagers' support. Followers have blind faith on Sajjada Nasheen.

Through this research I intend to explain that how Sufi shrine influence local community (not only the followers but also non-followers in the context of my research locale). My research problem is to explain the economy affected by Sufi shrine. This study will also investigate that, what are the effects of instrumentalizing these resources for the local community at large.

Religion is "the state of being grasped by an ultimate concern, a concern which qualifies all other concerns as preliminary, and a concern that in itself provides the answer to the question of the meaning of our existence (Tillich, 1963). Religion is everything in all societies. In Pakistani context being a Muslim religion is necessary for all fields of life. In my research, religion plays a vital role; according to my locale for poor people religion is more important than their lives. So they follow Sufi Shrine as they believe that Sufi shrine is the only source for them when it comes to satiating their religious and spiritual needs.

Sajjada Nasheen is the caretaker of any Sufi Shrine. He empowers to deal with spiritual offices and responsibilities (Troll, 1989). In my study Sajjada Nasheen is the focal person which is the caretaker of the Sufi Shrine.

Sufi Shrine is a holy place because of its associations with a divinity or a sacred person (Pirani, Papadopoulos, Foster, Leavey, & Culture, 2008). Sufi Shrine is the holy place because it is linked with buried Sufi. My research is also based on Sufi Shrine and its value is associated with the followers.

Culture is the Knowledge (Belief, Moral, Law and custom) that acquired by a person as a member of society to interpret experiences and generate behavior (Mackellar & Management, 2013). In my research context culture is Urs, Meela, Qawali and some other festivals of shrine.

2. REVIEW OF LITERATURE

Marxist has examined the links between economic, political and ideological class power. According to different Marxists approaches power mainly in social relation for production to control over state and then logically in heart and mind. Marxist introduces the limitation of power during exercise from one class to another. Marxists were interested in power as capacities and focus on capacities organized as a social relation. These social relations involve long-term relations. Here best example is Hegel's master-slave conflict in which the master depends on slave and slave depends on the master. According to Marx labor selling power for capital and capital depend on buyers so there is a positive relationship between them. Capacities to exercise power depend on their actualization on specific conditions (Barrow, 1993; Gramsci & Wishar, 1971; Mulloy & Moore, 1957; Offe, 1984). Marxism differs from others analysis of power because of its main focus on class power. It cannot focus on only one class; it focuses on the whole society. Marxists believe political or ethical domination originate less or more from economic domination, other stress complexity of relations among these three class methods of domination. Through Political revolution that the current design of class dominance will be defeated. The state is responsible for preserving the overall construction of class domination and social consistency, without which capitalisms contradictions cause revolutionary crises (Bridges & Society, 1974; Jessop & philosophy, 2005).

Marxism is premised on the different modes of production. A mode of production includes a specific combination of forces and social relations of production. Forces of production include raw materials, means of production, a division of labor for production, and the relation between producers and means of production. Social relations of production include the distribution of production, productive activities, and means of production. Some Marxist stress the power relations fixed in the organization of labor development. Marxist studies the overall production process and its articulation to another part of the circuit of capital. Different modes of economic growth are related to different forms of power, for example, a virtuous circle of mass production and mass consumption is closed economies (Bridges & Society, 1974).

Marxist political role begins with state and its role for securing condition of economic class power. The state is responsible for market growth and its failure. The economic and political struggle between capital necessities is very necessary for collective interest. Marxist says that if the state only secures the social consistency and institutional combination, will be benefited for extra economic condition and secured capital. There are three main approaches to the state: intuitionalist, structuralist and strategic-relational. Intuitionalist says the modern state as a state of capital (Barrow, 1993; Jessop & philosophy, 2005; Mulloy & Moore, 1957). Ralph Miliband state that the dominant class of society is that class which owns and regulate means of production, and uses economic power and state instruments to control over society. Structuralist says that the state is capitalist because it characteristically capitalist and work on the behalf of capital. They also say that the modern state is that which organize capital and disorder the class work. State direct control means of production means that its revenue depends on strong private sectors (Miliband, 1969). The strategic-relational approach used by Nicos Poulantzas which means that capital is not a thing but is a social relation to suggesting state as the social relation. Marx showed how sustained reproduction form of material and institutional form of capital showed the relation between change in capital and economic class struggle. The idea is that state social relation is important theoretically and politically, the state is by no means a class-neutral instrumentation. According to Marx and Engels the German ideology that the dominant class of any age is the ideas of governing class and related this phenomenon over the means of intellectual production (Bridges & Society, 1974). In the late nineteenth century, Marx interest in the methods and modalities of ideological class domination increase stronger with democratic government and mass politics. An Italian Communist (Gramsci & Wishar, 1971).

Antonio Gramsci developed a different approach to the analysis of class power. His main concern was to develop an independent Marxist science of politics in capitalist societies, to make a difference between state and politics. He identified that the state in its narrow sense with people, government formal decision-making procedures and its policies. Gramsci defined the state as the whole complex of theoretical and complex activities in which power class maintains its dominance. He said that the state always based on variable combinations of force and harmony. One of his key arguments is the need in the advanced capitalist equalities for a long-term war of position. If power gets early then this would be sharp but a shorter process (Gramsci & Wishar, 1971).

The relation between economic, social and ideological domination can be measured in terms of domination and the policies that help to undermine this selectivity's. The particular form of state privilege some policies over others, this type of state will be more accessible to some powers. According to Gramsci, there was a mutual relationship between the economic base and its politico moral structure. He studied this problem in terms of structure and superstructure through specific intellectual, moral and political follows (Gramsci & Wishar, 1971). Ethico-political not only co-constitutes economic constructions but also provides them with their rational and strength. Ethico-political is that in which ethics and politics both are involved. Such a mutual relationship occurs between base and superstructure. He introduced the concept of power bloc and hegemonic bloc to examine the associations among dominant classes. The concept of hegemonic bloc

means the historical harmony not of construction but of social forces. He also emphasized the need for a significant economic nucleus for long-term domination and assessed to build a willing power which ignored economic realities.

The main reason to study development is to expand the economy rather than society or culture. To improve all these factors economic anthropology introduced the concept of political economy. Political economy intersects with development thinking for a comprehensive understanding of this articulation. Economic anthropologists adopt political economy as a process in which social, political, economic and cultural factors are mixed. The impact of capitalism and its socio-economic significances has two consequences, first it emphasis on micro level to include a method of historian and second it saves anthropology from fate assigned (Wolf, 1969). In the form of the political economy many conventional disciplinary boundaries are highly random especially sociology of development. The various forms of neo-Marxist thinking on development and highpoint of French Marxist anthropology had great effects for the modification of theory on that field (Clammer, 1978; Seddon, 1978). Anthropology is a major factor in explaining the relationships between economic anthropology and development. To involve anthropology in social development means to reduce the costs of economic improvement. Simple is that economic anthropology is not a tool of development planner but it is a tool for socio-cultural significances of economic change.

The difference between old and new anthropology is that new anthropology has a connection with new structuralism. To understand the value of economic anthropology and Marxism source of anthropology, there is a need to understand its nature and condition. Transaction of goods is temporary in social relationships because of social relation exerts governance. Preoccupation with the instrument of distribution and production is the main feature of the classical or liberal situation. It contains several elements first is the economics of gifts and the role of gifts. A second element is that material dimension of the economy lies in the communications that contain express and modification. Primitive economic behavior is an aspect of relationship behavior different from capitalist production and market connections. Class relations are characterized only by capitalism. In primitive society, exploitation does not occur within the productive situations. In a primitive exchange economy, the capacity of the economy is limited, so surplus does not occur. Any kind of asset is capital (Hill & Polly, 1986) and any transfer of goods are exchanges (Sahlins, 1965). Anthropology is itself a historical science because it always lies in history from every prospect. The most associated with primitive society is that major impact of the relations between different patterns of productive forces within any given society which they are part. The notion of exploitation is related to a concept of mode of production and connects with ideas of relationships between means of production. The idea of surplus is obscured and people think that there is a connection between the existences of surplus. This increases the problems of distribution. In social production, a class is defined by functions of its member.

The relationships between Metropolis or neo-colonial satellites are lies between modes of production within pre- or non-capitalist economic systems. Economic anthropology has been subjected through its concepts from classical to an anthropological sphere.

There are some following positions of economic anthropology. First, there is a difference between primitive society and economic anthropology. Second, there is a suggestion about economic problems. The third social system only achieved when social system achieved by the particular economic system.

Role of material things is basic to every economy and there is a relationship between the social system and economic system. Firth's says that anthropology is a comparative study that makes its problem important. The evidence of gross root economic system is clear. The choice in use of the resource is a variety of behavior over human economic systems. Firth says that in every society people face the same problem, like how to use their resources. Economic anthropology studies this thing that how men solve these problems. Primitive economics forms a relationship that how people allocate and produces resources. This relationship works as a system of social involvements that usually found in industrial societies. Anthropologist recognizing that much learned from other disciplines and those disciplines developed themselves. Economic anthropology must develop their own concepts for the sake of their own needs. Primitive economic organizations are those, in which competition for status separate subsistence level. So Frank needs variation for the decomposition of pre capitalists. Whole book reference (Clammer, 1978).

According to (Hassan & Kamal, 2010), the annual ceremony of Urs is the big source of income for Sajjada Nasheen. The followers earning high income give more at shrine as compared to lower income and the well-educated give less at shrine as compared to people having low education. According to (Kottak, 2015), many religions focus on their shrines and other sacred places, where followers perform rituals. According to (Platteau, 2011), Sufi shrines in Pakistan are common places for celebrating rituals for their religious satisfaction. Over the last period's government involve in shrines and also collect income giving from visitors for shrines. People who come to shrines think that their all problems are due to cut from religion, so they think Sufi is more close to Allah, he helped him to resolve their problems. In Punjab and Baluchistan people donate due to fear of God and religious satisfaction, while in KPK people donate due to affordability. This study shows that people follow their religious sects or may be cultural background; there is not a single reason behind this.

There are many things that affect the behavior of people like a place of residence, earning an education. In the visitor of shrines mostly people are less educated and poor. There are few household issues giving at shrines but individual character and education also matter. It is generally thought that household with high income devotes much as compared to low income. But sometimes this perception proves wrong because poor people much giving as compared to rich people. Education is also an important factor like income. In this regard, it is suggested that people (less educated) having less opportunity and also faces many social problems more visiting to shrines to solve their problems. Another view is that to increase the level of job or income educated people to visit shrines. These two perceptions are based on survey data given by different household. In rural areas, people are less educated and have low income as compared to urban areas. They face many problems like socioeconomic so they visit mostly at a shrine to solve their problems. In

the form of donation, a cash donation is so important that mostly giving by Punjab. Another fact to visit shrines is the personal beliefs of people and motivation to solve problems. In all giving regard ministry of religions and Auqaf work at shrines but not all shrines only registered shrines. For the social welfare of people's, it is important to register all shrines and having the complete record of visitors and giving by them. This is also better for community development and shrines development. Residential status also matters to visit and giving at a shrine. Urban residential are mostly educated and having a good income to they visit less as compared to rural residential. Another reason is that shrines are usually located in rural areas and rural people attached spiritually and ritually with shrines. Reference of article is (Yusuf, 2020).

3. Research Methodology

Methodology refers to responding research questions in a logical way and in order to do that a well-framed research design is important to design as explained in the forthcoming text. Before explaining that, it is important to signify the study's research strategy/approach which in my case is qualitative. My research is narrative-driven and has focused on qualitative experiences, and makes use of qualitative data to explain the role of Sufi Shrine in local community. Hence, qualitative research seems to be the more appropriate choice of research strategy for the current research (Becker, Bryman, & Ferguson, 2012).

Research design provides a framework for the data collection and for the analysis of that data. It shows the dimensions of the research process. It includes the connection between variables; generalize the large group of data and appreciation of social phenomena and their interconnection (Becker et al., 2012). I have used case study design in the current research in which I have focused on single case study. There are different types of case study research designs such as explanatory, descriptive, or exploratory. I have chosen descriptive research design for the purpose of current research.

Rapport Building is a technique hinges on building relationships with the researcher's study subjects to smooth research process which entails conducting interviews and carrying out observational studies. As a resident of Kot Mitthan, I have used my personal affiliations with people relevant for the current research to elicit data on various themes or dimensions that are relevant for the current research. I have used this technique throughout my research process.

Interviews was defined as the conversational method of data elicitation, in the forthcoming text has been mentioned the interview types which were used for the current study. The researcher used unstructured interviews to extract data from UDCs the reason being that these interviews are conducted when uninterrupted, detailed and contextual data is needed from study subjects. In these interviews, the frequency and flow of questions are kept free, the researcher's positionality is also fluid and the type of questions is also open-ended. One of the types of unstructured interviews is narrative which I had conducted from UDCs (Camic, 2021) defines narratives as stories that give detailed accounts of events.

Semi-structured Interview was conducted from UDCs. These interviews are conducted with information-rich cases using both closed- and open-ended questions. The use of prompts and probes is also common while conducting this interview. These interviews are also effective for extracting data from UDCs who cannot meet more than once or who have limited time to elicit data.

Observation was used as a technique throughout my field work. I have gain data on how and why poor people value and give money to Shrine and Sajjada Naheen, especially on specific days of shrine events such as on Fridays and Sundays.

Sampling for the current research I have used both probability and non-probability sampling techniques. In the former the sample chosen is representative and in later the sample chosen is relevant.

4. Results and Discussions

According to (Hassan & Kamal, 2010), the annual ceremony of Urs is the big source of income for Sajjada Nasheen. The followers earning high income give more at shrine as compared to lower income and the well-educated give less at shrine as compared to people having low education.

The summary of interviews conducted in this research reveals that the shrine feeds the whole Mitthan Kot city. After the completion of Benazir Bridge, many people are doing different jobs in the shrine and have different shops near shrine because number of followers and visitors has increased on daily basis. The data also reveal that department of Auqaf and Sajjada Nasheen are reaping economic benefits spending nothing on shrine's development. Poor people help in langar and also give Nazrana to Sajjada Nasheen. The Sajjada Nasheen also receive financial assistance for langar and shrine from different donors but nothing is being spent on people. Respondents also shared that the manager of Auqaf enjoys nazrana given by people with the help of Pir and also enjoys the rents of shops and income of other assets of shrine. On each Friday money is poured into the shrine in different forms by the visitors. The rent of shops is high due to this reason prices are also very high. Now, Koreja family is in power and is enjoying luxurious life being over-confident that people will always be with them due to family's association with the shrine.

4.1. Giving at Shrine

All the following quotes state the fact that visitors incur expenditures within the premises of shrine benefitting the Sajjada Nasheen and Auqaf. In order to accrue benefits from people there are different channels within a well as outside the premises of shrine (in the form of shops selling religious commodities, box to offer money, or Nazrana offered by the visitors).

In the langar system of the shrine, different donors are involved. The main donor is the owner of Ashraf Sugar Mill (as stated earlier), who is the great follower of Khawaja Sahab. He has given a house to Sajjada Nasheen and also gives monlthly money for

langar. Hence capitalizing on people's emotive forces is one of the critical features of both supply and demand sides of those linked to the shrine in any capacity.

"When our wishes are fulfilled, we come here and give money or animal to Sajjada Nasheen or distributing rice according to our financial power".

"Yes, we contribute into langar according to our financial power, through money, animal or wheat".

"We do not give too much to Sajjada Nasheen but when we come we give some money to contribute into langar. Today we gave a goat to Sajjada Nasheen to offer Mannat".

"We are poor people we just support in the season of wheat according to our power. All the things that we are having are due to Khawaja Sahab, we are nothing without him".

"We do not know about family support, but when we visit shrine we put some money in the box or give money in the form of amulet".

4.2. Employment

The quotes as stated by people during the survey explain in-detail about the market forces functioning in the market. Both on the supply and demand sides, buyers and sellers are active as shrine provides with ample economic opportunities for people to earn livelihood. For the powerful position holders such as Sajjada Nasheen's, politician and Auqaf, shrine is also an economically lucrative enterprise.

Benazir Bridge has great benefit for us. It creates job opportunity for the people of District Rajanapur and also eases access to market for agricultural products. This bridge is also beneficial for Auqaf and Sajjada Nasheen because a number of visitors increase due to [this] bridge. This is also beneficial for shopkeepers; they earn lot of money from visitors.

The more the followers increase the more we earn. Our shops run with followers. In real meaning, we are not only attached with shrine but also factories where we buy products from to sell within and outside the shrine premises.

Every product sold in the shops has religious importance. Followers buy products in the name of religion like most bought products are sweet items (cardamom and dates). The number of followers increases our product sales.

In the past, we charged high prices from visitors due to high rent asked by Auqaf and visitors visited in winters only. But now visitors come here whole year and we charge reasonable prices. The greater number of visitors also gives benefit to Auqaf and Sajjada Nasheen they also earn money like Nazrana etc.

4.3. Cultural Impacts

The local community also has the benefit of shrine, they earn money from this shrine; after the completion of Benazir Bridge, and five to six thousand people daily visit the

shrine. In the past, people only visited in winters but now people visit here during every season. At the time of Urs almost 6 to 7 lacs people visited in [just] three days and people earned a lot of money in these [three days].

Many visitors visit shrine every day, but the specific days are Monday and Friday. The most crowded day is Friday because people come from other cities for Friday prayers and festival of Qawali happens on every Friday in the shrine.

There are different small festivals arranged in the shrine by Auqaf department such as festivals of Qawali on Friday. But the big shrine festival is Urs which has been stopped due to issue between Sajjada Nasheen and Auqaf department. The Urs ceremony which used to be celebrated in shrine held on 6th, 7th and 8th Rabe us Sani each year. Spiritual practices performed at shrine are different.

In the Past, Government arranged the festival of Mila. That Mila was the source of income not only for Mitthan Kot people and also for many other people. We earned lot of money from Mila that we used to use for six months. When the Pirs became powerful they influenced festival of Mila due to personal interest. Government put a ban on Mila in Mitthan Kot. Since last two to three years Sajjada Nasheen has also changed the rule of Nazrana, they said to follower to give the Nazrana double otherwise we cannot accept it. If you give one animal or ten thousand etc. every year, now you give double to this amount.

Shrine is the only source of income for Khwajgan; they do not have any other source of income. Through shrine now they have other source of income that is politics. There are both girls and boy's colleges, a hospital, but lack of staff due to personal interest of Sajjada Nasheen and feudal. People are satisfied because they do not say anything about Pir and feudal. If someone says against them, he will face many hurdles in his life. In 2010 flood, different non-governmental organizations and government gave a lot of money and other things for poor people and for the development of shrine, but Pir and feudal have used this money for their personal benefit and they don't bother to spend a single rupee on poor people.

4.4. Benefits attributed to Sajjada Nasheen

Despite having access over resources which the sajjada Nasheen accrue from Auqaf, visitors, followers, governmental and non-governmental sources, the amounts have rarely been allocated to where they belong. The power over resources has rarely been translated into power to and power into for meeting the communal practical or strategic needs.

At this time Sajjada Nasheen himself is in power because he is the president of international ulama e mashaikh. People of Mitthan Kot are very disappointed from Sajjada Nasheen's family, they only respect shrine. Local communities that are followers of Khawaja Sahab are the main source of Pir power.

The respondents talk us through the fact that despite holding economic power, the Sajjada Nasheen have not met the promises and they feel disappointed over their dismal

performance and that they respect shrine for its religious history and emotional connection with the saint.

If the Sajjada Nasheen wants to have a successful political career, then at least shrine must not be used a coil. Rather, they should do well for community.

5. Conclusion

This study identifies how Sajjada Nasheen used Sufi Shrine for their financial benefits. This is the policy failure and also the failure of the check and balance of the Auqaf department. The data also revealed about the festivals of shrine. There are different small festivals arranged in the shrine by Auqaf department such as festivals of Qawali on Fridays. But the big shrine festival is Urs which has been stopped due to issue between Sajjada Nasheen and Auqaf department.

The Urs ceremony which used to be celebrated in shrine held on 6th, 7th and 8th Rabe us Sani each year. Many visitors visit shrine every day, but the specific days are Monday and Friday. The most crowded day is Friday because people come from other cities for Friday prayers and festival of Qawali happens on every Friday in the shrine. One respondent sated that in the past government arranged Mila in the shrine for three days and in these three days many followers used to pay visit. The shopkeepers used to earn almost six month's income in these three days. But due to issues of Khwajgan (explained in the next section) with Auqaf, Auqaf can no longer arrange mela festival in the festival. Spiritual practices performed at shrine are different. Some people visit the shrine in the quest of curing illness for instance one respondent shared of spending nine nights in the shrine for curing illness. Some came for marriage, some came for children and some came for poverty reduction. The water of pool in the shrine is used to cure diseases. People also get amulet (taveez) for different purposes. People visit the shrine when they are facing an issue for which remedy is required. The shrine of Khawaja Sahab is very important for the entire region. People visit shrine when they are face issue to solve those issues through spiritual practices. After the completion of Benazir Bridge, a number of visitors have increased at the shrine. Many people are engaged in different jobs through this shrine. Followers of Khawaja Sahab are not only Muslims but also non-Muslims who visit shrine. This Shrine is not only famous in Pakistan but also in different countries due to Khawaja Sahab. Shrine of Mitthan Kot is the identity of city Mitthan Kot and whole district Rajanpur as shared by one respondent.

The data from (Pirani et al., 2008) show that Sufi Shrine is a sacred place due to the buried sacred person. My findings show the same result that a Sufi shrine is a sacred place. The buried Sufi Hazrat Khawaja Ghulam Farid was a great Sufi. He always gives the teachings of love and peace. After Khawaja Sahab, the shrine is under the caretaking of Khawaja Moeen ud Din. Now he is the caretaker of Shrine.

The data about Sajjada Nasheen from (Rehman & Society, 2017) shows that Sajjada Nasheen is the spiritual authority and caretaker of Sufi Shrine. He educates religious and spiritual teachings. My findings are the opposite, according to my findings Sajjada Nasheen is the caretaker of Sufi Shrine but he only gets benefit from Shrine. Sajjada Nasheen is enjoying political power and financial benefit from Shrine. When we talk

about religious and spiritual education, Sajjada Nasheen stops the education process in the Shrine. Due to Sajjada Nasheen, the number of visitors decreases day by day in the Shrine, because they also get benefit from visitors.

These Sajjada Nasheen's are connected with social groups to get power. Social groups perform different activities in the Shrine. The data from Rehman about spiritual practices performed by social groups show that followers perform spiritual practices to manage their daily lives according to religion and society. People also perform spiritual practices to solve problems such as health, poverty, and marriage, etc. My finding shows the same result that people perform spiritual practices for different problems according to religion and society. Some people spend 9 nights at the shrine for illness, some drinking water from the pool to get freedom from different diseases, some get amulet from Pir Sahab for different purposes and many other practices. But the main problem in my locale is that sajjada Nasheen engaged with people through these practices to get benefit from followers. In this regard, my findings are opposite to the findings of Rehman.

6. Recommendations

Government needs to restrict and monitor the role of Sajjada Nasheen in the Shrine in order to restrain them getting the financial benefits from shrine. The religious education of people also needs to be redefined by the government so that the influence of Sajjada Nasheen in local community should decrease. In addition, government should improve the transparency of law enforcement agencies to diminish the power of Sajjada Nasheen. One of the benefits of the decline in the power of Sajjada Nasheen would be that people can also elect the one they want to be elected. Lastly, government ought to make sure the accountability of Auqaf department in order to earn revenues and for the development of shrines.

7. References

Barrow, C. W. (1993). Critical theories of the state: Marxist, neomarxist, postmarxist: Univ of Wisconsin Press.

Becker, S., Bryman, A., & Ferguson, H. (2012). Understanding research for social policy and social work: themes, methods and approaches: policy press.

Boivin, M. J. B. c. d. A. i. (2002). Aziz KK, Religion, Land and Politics in Pakistan. A Study of Piri-Muridi. Vanguard, Lahore, 2001. 18(1), 54-55.

Bridges, A. B. J. P., & Society. (1974). Nicos Poulantzas and the Marxist theory of the state. 4(2), 161-190.

Camic, P. M. (2021). Qualitative research in psychology: Expanding perspectives in methodology and design: American Psychological Association.

Clammer, J. (1978). Concepts and objects in economic anthropology. In The new economic anthropology (pp. 1-20): Springer.

Epping, E. J. P. A. J. o. P. S. (2013). Politics and Pirs: The Nature of Sufi Political Engagement in 20th and 21st Century Pakistan. 5(3).

Gramsci, A. J. L. L., & Wishar. (1971). Selections from the Prison Notebooks, edited and translated by Q. Hoare and G. Nowell Smith.

Hassan, B., & Kamal, A. J. P. J. o. P. R. (2010). Development and validation of the Piri-Muridi scale. 79-97.

Hill, P., & Polly, H. (1986). Development economics on trial: the anthropological case for a prosecution: Cambridge University Press.

Jessop, B. J. C. r. o. i. s., & philosophy, p. (2005). Gramsci as a spatial theorist. 8(4), 421-437.

Kottak, C. P. (2015). Cultural anthropology: Appreciating cultural diversity: McGraw-Hill Education.

Mackellar, J. J. I. J. o. E., & Management, F. (2013). Participant observation at events: theory, practice and potential.

Malik, A., & Mirza, R. A. J. U. m. t., Oxford, University of Oxford. (2015). Religion, Land and Politics: Shrines and Literacy in Punjab.

Miliband, R. (1969). The state in capitalist society.

Mulloy, J., & Moore, J. J. T. S. (1957). Dawson, C.," Dynamics of World History"(Book Review). 18, 478.

Offe, C. J. T. (1984). The Future of the Labor Market. 1984(60), 81-96.

Pirani, F. M., Papadopoulos, R., Foster, J., Leavey, G. J. M. H., Religion, & Culture. (2008). "I will accept whatever is meant for us. I wait for that—day and night": The search for healing at a Muslim shrine in Pakistan. 11(4), 375-386.

Platteau, J.-P. J. W. D. (2011). Political instrumentalization of Islam and the risk of obscurantist deadlock. 39(2), 243-260.

Rehman, U. J. N. J. o. R., & Society. (2017). Religion, politics and holy shrines in Pakistan. 19(2), 17-28.

Sahlins, M. J. T. r. o. m. f. s. a. (1965). On the sociology of primitive exchange. 139, 236.

Seddon, D. (1978). Economic Anthropology or Political Economy? (II): Approaches to the Analysis of Pre-Capitalist Formation in the Maghreb. In The New Economic Anthropology (pp. 61-109): Springer.

Tillich, P. (1963). Christianity and the Encounter of the World Religions. In Christianity and the Encounter of the World Religions: Columbia University Press.

Troll, C. W. J. I. i. I. (1989). Muslim shrines in India: their character, history and significance. 4.

Wolf, T. P. (1969). The Life of Politics. In: JSTOR.

Yusuf, H. (2020). Culture and mental health in Pakistan. In The Routledge International Handbook of Race, Culture and Mental Health (pp. 434-444): Routledge.

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Attitudes of Punjabi Speakers towards their Mother Tongue in Dilawar, Punjab, Pakistan

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Abstract
The study has investigated attitudes of educated and uneducated Punjabi speakers towards their native language. The comparison of attitudes of both kinds of people was an indication to know about the local usage of Punjabi language too. The researcher wanted to know whether the myths towards the use of Punjabi language in Pakistan are applicable or not. Research questions were designed to find out perceptions, feelings and thoughts of educated and uneducated Punjabis towards their mother tongue. For this purpose, researcher made use of quantitative method and the data was collected with the help of questionnaires, from the population of Dilawar, Punjab. Total number of participants were 100; 50 were educated and 50 were uneducated. The data was analyzed though SPSS and it was seen that Punjabi speakers disown their mother tongue in Pakistan because it does not give them access to power and job opportunities. Their reasons behind holding negative attitudes were quite instrumental as the state does not give prestigious status to Punjabi language when it comes to academics and jobs.

Keywords: *Attitude, Mother tongue, Punjabi speakers, Punjabi language, prestigious status.*

1. Introduction

Language is very important element in the lives of human beings. This is an integral part of their lives, not only because of the communicative role it plays but also because of the power (political, economic, and colonial) attached to it. As the stratification of nations and people, languages are also stratified in the world. Some languages are powerful, and others are weak. This depends upon the political control of their people. Therefore, people tend to generate attitudes/ beliefs/ ideologies towards particular languages. Those languages are labelled as strong whose speakers are having political control over particular area of world. Thus, positive attitudes are formed among people to learn and use those particular languages. They believe learning these languages can lead them to success and honor. On the other hand, weak languages are marginalized by their own people because they cannot make them powerful and in this way negative attitudes are formed for these languages. People do not want their children to learn the weaker

languages. Such negative attitudes are also said to be possessed by Panjabi speakers in Pakistan.

Pakistan is a country located in Asian continent and almost more than 70 languages are spoken in Pakistan (Ahmad & Rao, 2013). Urdu is the national language of the country and English is used as the official language. In fact, English language is used as the Second Language for higher education, professional forums, business, the trade overseas, travelling to other countries and communication with the rest of the world (Ahmad & Rao, 2013). These statuses have been given to English and Urdu language since the times of independence. Therefore, Punjabi speakers themselves are assumed to have negative attitudes towards their mother tongue. This study aims to explore whether the above mentioned details are also applicable in Dilawar, Punjab or not.

The current study aimed at answering the research questions i.e. (a). What are attitudes of educated Punjabi speakers towards their mother tongue? (b). What are attitudes of uneducated Punjabi speakers towards their mother tongue? and (c). What are the differences in the attitudes of educated and uneducated speakers of Punjabi language? Because the significance of this current study aims to research through presenting a theoretical framework to prove whether the assumptions of negligence of Punjabi by its speakers are also applicable in Dilawar, Punjab or not. This research was also important because it intended to cover both educated and uneducated Punjabi speakers at the same time. Moreover, it also compared their attitudes to find out real implementation of Punjabi language in Dilawar. Apart from this, the village Dilawar had never been chosen as research context in this regard. The study highlighted language shift from Punjabi to Urdu and English language more in educated people in comparison to uneducated People in Dilawar. But Punjabi is still used by both as soft power. This research can also be utilized in other contexts for many other languages to find out attitudes and impacts.

2. Literature Review

Punjabi language was spoken by 44.15% people in 1998 and today, it has 38.78% native speakers in Pakistan. This decline in the usage of Punjabi Language by its native speakers is because of the reason that the state has not given any official status to this language. Moreover, most of the parents prohibit their children to speak Punjabi language in Pakistan because Punjabi speaking children are connoted as village yokel and rustic. Siddique (2016) talked about how a school in Sahiwal showed negative attitude towards Punjabi language and prohibit students from speaking Punjabi language in and outside school and labeled it as "Foul language". This negative attitude towards Punjabi Language is from the British era. Unlike Sindh, in Punjab, when Britishers replaced Persian language from Punjab, they used Urdu instead of Punjabi and for this step, they gave explanation that we have used Urdu instead of Punjabi because Urdu is more refined form of Punjabi. In addition, Punjabi is a dialect of village yokel or of lower class.

The negative attitude towards Punjabi language by its own native speakers is not only because of Britishers only, but also because of Punjabi elites who after independence, deserted their own language to be the part of prestigious groups. Mansoor (1993) shares his survey result in which 59% Punjabi students had negative attitudes towards their

language. He shared an opinion of a Lahori man who was a cab driver and gave more importance to Urdu and tried to avoid conversations in Punjabi. This man believed that Urdu was a sweeter language and Punjabi was a dirty language therefore, he tried not to speak it at least in formal conversations.

He also shared a horrible fact that to what extent Punjabi speakers feel ashamed of their language that in the census of 1998, most of the educated, urban middle class Punjabis marked their mother language as Urdu instead of Punjabi. Rahman (1996) said that educated Punjabis prefer to teach their children in Urdu and English because they consider Punjabi as an unsophisticated and uncultured language.

According to Majeed (2016), she and her siblings were always ashamed of speaking Punjabi language and pretended that Punjabi is not their linguistic identity because of the negative reaction of people after listening Punjabi language and its linkage with the lower middle class. Zaidi (2015) said that Fazul Hussain, a Punjabi parliamentarian insisted on taking Oath in Punjabi language therefore, he was thrown out of parliament in the presence of hundreds of Punjabis on the order of speaker who was a Punjab native.
Sabah (2018) in its article "Pakistan: A land of many languages" wrote that smaller languages and cultures are in danger due to globalization. Globalization is a predator and smaller languages are its prey. People are shifting from their mother tongue to other language for academic and economic reasons. Migration is also the reason of language shift (Agency, 2018).

According to Zaidi (2010), Punjabi graduates feel embarrassed of their linguistic identity and call themselves Urdu speakers. He also said that in Pakistan, languages except Urdu are neither accepted nor encouraged, they are just tolerated. Iqbal (2018) refers to Khoklove (2014) who said that most of the youth in Pakistan prefer English or Urdu language for their social and academic activities. They have negative and disrespectful attitude towards their own languages. He further says that Punjabis who are considered as the most educated group in the country are the most illiterate in their mother tongue. He calls this situation as 'Linguistic Schizophrenia'. research is to explore teachers' teaching practices of ECCE teachers Utilized in different context.

3. Research Methodology

In the current study, quantitative method was used to analyze and collect data. According to Williams (2007), it is a type of research method in which researcher collects data which is numeric in nature and uses mathematical models to analyze the data. The aim of the research was to know effects of the particular variable i.e. education on its speakers. Research aimed to find out perceptions of Punjabi speakers towards their mother tongue. Therefore, the researcher chose the quantitative method to maintain the objectivity of the research. A close ended questionnaire was used as the research instrument to collect the data. It had 20 items and it was divided into three sections. The questionnaire was adapted from Gillani & Asim (2014). The participants were contacted by the researcher through telephonic calls and later on, they were given the survey.

Researcher had done stratified sampling for this study because researcher had collected data from Punjabi speakers, who were divided into two categories, i.e. educated and

uneducated. The convenient method of sampling was also used as the researcher had selected the participants from the village Dilawar, Punjab. The convenient method was used because the researcher collected data from those participants who were easily available. Researcher had 100 participants for his research; out of which 51 participants were educated and 49 participants were uneducated. People who had done their matriculation and were enrolled in college or university were grouped as "educated" and those who left their schools after 8th class or had never gone to school were grouped as "uneducated". The reason for choosing only 100 people was that Dilawar is an under developed area and mobile phones are not easily available to everyone there. Moreover, since the participants were approached through telephonic calls, it was experienced that the area also had very poor network signals. So the researcher was able to approach around 100 people as per convenience. Dilawar was chosen for this study since the research on this or similar topics were not done here and it was accessible to researcher therefore, the research preferred Dilawar over other cities.

4. Results and Discussion

In this study, the data was collected through a survey and it was analyzed by a software called SPSS. The researcher had used crosstab in SPSS to analyze data because the study aimed to show differences in the perceptions of educated and uneducated Punjabi speakers.

1. I know writing style (script) of Punjabi.

I know writing style (script) of Punjabi.

	Yes	No	Total
Educated	26	25	51
Uneducated	1	48	49
Total	27	73	100

Majority of the speakers of Punjabi language are unaware of the writing script of Punjabi language. This question was answered by 51 educated and 49 uneducated speakers of Punjabi language. 26% educated and 1% uneducated Punjabi speakers said that they know writing script of Punjabi whereas, 25% educated and 48% uneducated Punjabi speakers said that they are not aware of the writing script of Punjabi language. Although, as compared to the uneducated ones.

2. I write text messages in ____.

I write text messages in

	Roman Script	If others, specify	Don't use Punjabi	Total
Educated	38	13	0	51
Uneducated	18	12	19	49
Total	56	25	19	100

This question was also answered by 51 educated and 49 uneducated speakers of Punjabi language. It was actually shocking to know that none of the speakers said that they prefer Punjabi language in their typing. Mostly, uneducated speakers preferred Urdu in their

typing/letters whereas, educated people preferred to use Roman or English language. This showed the extent to which Punjabi speakers ignore their language and prefer other's language. This ignorance of Punjabi speakers towards their mother tongue is endangering Punjabi language.

3) I can read Punjabi.

I can read Punjabi.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Educated	7	10	5	23	9	51
Uneducated	4	10	3	6	23	49
Total	11	20	8	29	32	100

This question also had 100 participants; 51 educated and 49 uneducated. 17% of the educated Punjabi speakers and 14% uneducated speakers agreed that they can read Punjabi language fluently. 32% educated and 29% uneducated Punjabi speakers said that they cannot read Punjabi language. Educated ones had more ratios because they had more exposure to read different texts as compared to uneducated ones. It was quite unexpected to get answers where speakers said that they cannot read Punjabi because Punjabi poetry had always been famous and is in approach to every person. This shows that how speakers, irrespective of their education, ignore their language and don't even bother to read Punjabi text.

4. I have read Punjabi as a subject.

I have read Punjabi as a subject.

	Yes	No	Total
Educated	5	46	51
Uneducated	0	49	49
Total	5	95	100

This study was conducted in one of the village of Punjab where Punjabi speakers are in majority. Unfortunately, only 5% of the educated speakers said that they have read Punjabi language as a subject whereas, 46% of the educated speakers and 49% uneducated speakers of Punjabi language said that they had never studied Punjabi as a subject. This shows that neither Punjabi speakers nor government cares about Punjabi language and how it is being in danger due to its speakers and state policy.

5. I prefer ____ language in my social life.

I prefer ____ language in my social life.

	Punjabi	Urdu	English	Total
Educated	3	30	18	51
Uneducated	28	19	2	49
Total	31	49	20	100

According to data collected from Punjabi speakers, it was found that 18% of educated Punjabi speakers prefer English language, 30% Punjabi speakers prefer Urdu and only 3% educated speakers use Punjabi language in their social life. On the other hand, 28% uneducated Punjabi speakers prefer Punjabi language, 19% prefer Urdu and only 2% use English language in their life.

6. I prefer ____ language in my professional life.

I prefer ____ language in my professional life.

	Punjabi	Urdu	English	Other	Total
Educated	9	22	15	5	51
Uneducated	30	7	5	7	49
Total	39	29	23	9	100

This table shows that 22% educated Punjabi speakers prefer Urdu, 15% prefer English and 9% prefer English language whereas, 30% uneducated Punjabi speakers prefer Punjabi, 7% use Urdu, 5% prefer English language and 7% prefer other languages. This graph shows that educated people are shifting from their own language whereas, quite few uneducated Punjabis show language shift. The reason behind can be that educated people living in Dilawar are migrating, their language needs are changing and they have to interact with people from different educational and social background therefore, they prefer English and Urdu in their professional life. On the other hand, uneducated Punjabis do not find any specific need to communicate in other's language, their interaction takes place with people of similar educational background therefore, and their ration to language shift is less than educated Punjabis.

7. I prefer _____ language in informal situations

I prefer _____ language in informal situations.

	Punjabi	Urdu	Total
Educated	11	40	51
Uneducated	36	13	49
Total	47	53	100

This table shows that 11% of educated Punjabis prefer Punjabi language and 40% of them use Urdu in their informal life. However, 36% uneducated Punjabi speakers prefer to speak in Punjabi language and 13% use Urdu in their social life. These results show that educated Punjabis ignore their mother tongue as compared to uneducated Punjabi speakers.

8. _____ Language is easier for me to speak.

_____ Language is easier for me to speak.

	Punjabi	Urdu	English	Others	Total
Educated	13	19	13	6	51
Uneducated	31	13	3	2	49
Total	44	32	16	8	100

This table shows ease and comfort of educated and uneducated Punjabis while speaking their own mother tongue and second language. According to the data collected, 13% educated Punjabis feel easy to speak their own language, 19% said that they feel easy to speak in Urdu language and 13% said that English language is easier for them to speak as compared to their own mother tongue. However, 31% uneducated Punjabis said that Punjabi language is easier for them to speak, 13% said that Urdu language is easier for them to speak and 3% said that English is easier to speak for them.

9. I am fluent in Punjabi.

I am fluent in Punjabi.

	Strongly agree	Agree	Disagree	Total
Educated	28	10	13	51
Uneducated	35	6	8	49
Total	63	16	21	100

This table indicates that 38% of educated and 41% uneducated people are fluent in Punjabi. The ratio is quite closer between both types of participants. Punjabis are quite

fluent in Punjabi though they don't prefer their language in power domains. It doesn't matter that they are educated or not but they have access to their language in their homes. However, 13% educated people have not enough fluency of Punjabi. Because after being educated they think that Punjabi is not suitable for their children and it won't help them to achieve their goals.

10. My parents speak in ____ language among themselves.

My parents speak in ____ language among themselves.

	Punjabi	Urdu	Total
Educated	50	1	51
Uneducated	49	0	49
Total	99	1	100

This table shows that 50% of the parents of educated Punjabis prefer Punjabi to talk to each other. On the other hand, 49% of the parents of uneducated Punjabis also prefer to speak in Punjabi. This shows that first generation of Punjabi speakers is closer to their language and values it more than any other language. However, second generation ignores their language. This ignorance is increasing with an increase in education

11. I will prefer to speak in ____ language with my children.

I will prefer to speak in ____ language with my children.

	Punjabi	Urdu	English	No Response	Total
Educated	13	24	13	1	51
Uneducated	19	21	8	1	49
Total	32	45	21	2	100

According to above ratio shown in the table, 37% educated people give more priority to English and Urdu over Punjabi and only 13% educated people use Punjabi language with their children. Because they want their children to be more sophisticated and cultured.

12. I want to preserve language of my forefathers.

I want to preserve language of my forefathers.

	Strongly agree	Agree	Disagree	Strongly disagree	Total
Educated	19	24	7	1	51
Uneducated	36	9	4	0	49
Total	55	33	11	1	100

The above table shows that Punjabis want to preserve their language, whether they are educated or uneducated. In this regard education hasn't much affected their attitudes. They want to save the literature and want to publish the course books of Punjabi.

13. I feel proud while speaking Punjabi.

I feel proud while speaking Punjabi.

	Strongly agree	Agree	Disagree	Strongly disagree	Total
Educated	24	4	8	15	51
Uneducated	41	1	0	7	49
Total	65	5	8	22	100

According to the responses, education has put an immense impact on the attitudes of people. Among the total participants, 42% of uneducated people feel proud to use Punjabi language and they use Punjabi in their homes and friends as well. On the contrary, only 28% of educated people are proud of their language and don't feel shame while using Punjabi with their family and friends. While many of them think that Punjabi is rustic language and it is not going to give us any privilege, so we should avoid this language.

14. Print and electronic media should promote Punjabi language.

Print and electronic media should promote Punjabi language.

	Strongly agree	Agree	Disagree	Strongly disagree	Total
Educated	16	21	7	7	51
Uneducated	34	9	4	2	49
Total	50	30	11	9	100

This table shows that majority of the participant accord with the statement that Punjabi should be promoted through print or electronic media. However, they don't want Punjabi in hard power as it is not going to give them any advantage but they want it to be used in soft power. They want to promote language through print and electronic media, songs, movies, books etc., so that the language prospers.

15. Urdu has higher status than Punjabi.

Urdu has higher status than Punjabi.

	Strongly agree	Agree	Total
Educated	49	2	51
Uneducated	49	0	49
Total	98	2	100

The above table shows that all the participants believe that Urdu has higher status than Punjabi. According to them it is quite general statement and the fact because our language policy favors Urdu and English only. It does not promote Punjabi or other languages.

16. Medium of instruction should be Punjabi.

Medium of instruction should be Punjabi.

	Strongly agree	Disagree	Strongly disagree	Total
Educated	1	14	36	51
Uneducated	0	5	44	49
Total	1	19	80	100

In this table, 50% educated and 49% disagree with the view that Punjabi should be medium of instruction. Punjabi speakers are of this view because their language is neither having any status in the policy nor it helps children to get good job therefore, they don't prefer Punjabi to be the medium of instruction.

17. In modern age, Punjabi is advantageous.

In modern age, Punjabi is advantageous.

	Strongly agree	Disagree	Strongly disagree	Total
Educated	2	10	39	51
Uneducated	0	5	44	49
Total	2	15	83	100

In this table, 49% educated Punjabis and 49% uneducated Punjabis believe that Punjabi is of no use in today's time whereas, 2% educated think that Punjabi is useful in modern age as well.

18. Educating people in Punjabi will fail purpose of education.

Educating people in Punjabi will fail purpose of education.

	Strongly agree	Agree	Disagree	Strongly disagree	Total
Educated	9	6	9	27	51
Uneducated	21	1	4	23	49
Total	30	7	13	50	100

Education in mother tongue is linguistic human right of every individual. This table show that 15% educated and 22% uneducated Punjabis agree that educating people in Punjabi will fail purpose of education. However, 36% educated and 27% uneducated Punjabis disagree with this view. From the data collected, researcher finds out that uneducated speakers are more negative towards their mother tongue. They don't want Punjabi language to be the part of educational policy.

19. Punjabi should be promoted.

Punjabi should be promoted.

	Strongly agree	Agree	Disagree	Strongly disagree	Total
Educated	26	16	1	8	51
Uneducated	40	5	0	4	49
Total	66	21	1	12	100

This table shows that Punjabi speakers are interested towards promotion of their language. 42% educated and 45% uneducated speakers want their language to be promoted.

20. Punjabi is language of _____.

Punjabi is language of

	Prestige and pride	Rustic people	Power	Total
Educated	5	34	12	51
Uneducated	1	31	17	49
Total	6	65	29	100

This table shows perceptions of Punjabi people towards their mother tongue. In the table, majority of educated and uneducated speakers have shown negative attitude for their language. 34% educated and 31% uneducated Punjabi speakers said that Punjabi is a language of rustic people.

It has been found from the data that Punjabi speakers do not prefer their mother tongue and give importance to other languages i.e. English and Urdu. The negative attitudes of Punjabi speakers towards their native language are the reason behind language shift of educated Punjabis. This 'language shame' of Punjabi speakers has endangered their language. The findings are in alignment with findings of Studer and Konstantinidou (2015) where the researchers had found that the attitudes of speakers towards any language have a lot to do with their linguistic self-confidence. The Punjabi language do not provide self-confidence to its speakers due to instrumental reasons. Moreover, youngsters are more likely to shift their linguistic identities, so they show more preference towards using English and Urdu than using Punjabi. Such patterns are showing similarity with the research of Bichani (2015) where she has showed that youngsters are seen showing more eagerness towards shifting their linguistic and cultural identities and going for global languages when it comes to usage in different settings.

Even though the educated Punjabis do not speak in their language and are also ashamed of it. However, they have love for their language and want it to prosper. Punjabi is neither official nor provincial language of country. In Pakistan, Punjabis are in the majority but, their language is not having any linguistic right. Therefore, this perception of Punjabis is right in a way that Punjabi is not a bread winning language.

It has also been revealed from the data that educated speakers are more negative towards their mother tongue. They don't want Punjabi language to be the part of educational policy. Research also indicates that education has also put an immense impact on the attitudes of people. This happens because educational norms do not show acceptance towards non-standard languages, so people are left with no options other than trying to be fluent in national and international language. In the journey, they leave their mother tongue in the backgrounds. Here the study of (Roos, 2016)is important because according to the findings of the study, education must show acceptance towards all the languages so that people can confidently use their mother languages in different settings.

Among the total participants, many uneducated people feel proud to use Punjabi language and they use Punjabi in their homes and friends as well. On the contrary, only few educated people are proud of their language and don't feel shame while using Punjabi with their family and friends. Most of them go for English and Urdu for instrumental reasons. Here, the findings are in alignment with the findings of (Getie, 2020) where it has been concluded that the attitudes of people directly depend upon their instrumental motivation to learn and use a language; they want to get good jobs and prestigious statuses in the society. While many of them think that Punjabi is rustic language and it is not going to give us any privilege, so we should avoid this language. The ratio of uneducated people using Punjabi language with their children is higher than educated people but not as high enough to save Punjabi language and literature. Uneducated people are coming after the

educated people, which reflects that Punjabi is soon to be in the list of endangered languages.

The data has indicated that unlike uneducated speakers, educated Punjabi speakers prefer to use Urdu and English in their social life instead of Punjabi to make themselves classier and sophisticated. Getie (2020) also found similar results in his research where people showed more inclination towards the language of power so they could get good jobs after mastering the language. This also shows that educated people are shifting from Punjabi language to the languages of power for their instrumental reasons.

However, uneducated are stick to their Punjabi language as it is fulfilling their needs of social life. The ratio of uneducated people who are not enough fluent speakers of Punjabi is quite low, as they give preference to Punjabi outside their homes and with their children as well. This shows that uneducated ones speak in Punjabi easily because it is their mother tongue; they have more access to it. In contrast, educated Punjabis feel easy to speak in their mother tongue as well as in their second language. Punjabi language is easier for them to speak because they have access to it in home and Urdu/English is convenient for them as it is the language they learn and use in their schools and professional life. Educated ones prefer to speak in languages other than Punjabi because they think Punjabi language is not fulfilling needs of modern age therefore, they devalue their own language and shift to others whereas, uneducated Punjabi speakers show less shift in language. But, it is also a fact that educated speakers make and bring change in society. Their language shift is negatively affecting their own language and may endanger it.

5. Conclusion

Punjabi speakers in Pakistan are not proud of their identity and language for many possible reasons; their language has never been given any prestigious and standardized roles in education, jobs, social circles, etc. people do not want to read and write in Punjabi because they know that they will not get respectful jobs if they use this language. Not only this, even if we talk about the conditions before the partition of Pakistan, the Punjabi language never achieved any standard role during the British era. Parents of young children do not want their children to use Punjabi in social and academic settings because they think that this language will keep their kids away from success and prestigious life unlike English and Urdu. Similarly, the youngsters also go for English and Urdu in order to get economic benefits in this technology oriented era. The research also concludes that first generation of Punjabi speakers is closer to their language and values it more than any other language. However, second generation ignores their language. This ignorance is increasing with an increase in education.

5. References

Abbas, F &Iqbal. (2018). The language attitude of Pakistani youth towards English, Urdu and Punjabi: A comparative study. Pakistan Journal of Distance and Online Learning, 4(1), 199-214. Retrieved from http://pjdol.aiou.edu.pk/wp-content/uploads/2018/08/14-the-language-attitude-of-the-pakistani.pdf

Agency, A. (2018, March 10). Pakistan: A land of many languages. Retrieved from Daily Sabah: https://www.dailysabah.com/travel/2018/03/10/pakistan-a-land-of-many-languages

Ahmad, S., & Rao, C. (2013). Applying Communicative Approach in Teaching English as a Foreign Language: A Case Study of Pakistan. PortaLinguarum, 1-17. Retrieved March 01, 2016.

Bangash, Y.K. (2013, November 24). Our language dilemma. The News. Available on http://tns.thenews.com.pk/our-language-dilemma/#.XDt-cVxKhPY

Bichani, S. (2015). A Study of Language Use, Language Attitudes and Identities in Two Arabic Speaking Communities in the UK. Department of English Language and Linguistics

Census 2017 language data. (2018, May 28). Dawn. Retrieved from https://defence.pk/pdf/threads/census-2017-language-data.560777/

Chaudhry, A. (2012, March 16). I speak Punjabi (but my kids might not) (Blog post). The Express Tribune blogs. Retrieved from https://blogs.tribune.com.pk/story/10622/i-speak-punjabi-but-my-kids-might-not/

Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. Cogent Education, 7(1). Retrieved from https://doi.org/10.1080/2331186X.2020.1738184

Gilani, M. Asim, M. (2014). Punjabi: A tolerated Language Young generation's attitude. Research on Humanities and Social Sciences.Vol.4, No. 5, 2014.

Hassan, S. (n.d.). Am I a 'ganwaar' if I speak in Punjabi? Retrieved from https://blogs.tribune.com.pk/story/20707/am-i-a-ganwaar-if-i-speak-in-punjabi/

John, A. (2014, February 27). Ideology, language attitudes and the status of Punjabi. Daily Times. Retrieved from http://apnaorg.com/articles/status/index.shtml

John, A. (2015). Ideology, language attitudes, and status of Punjabi in Pakistan (Doctoral Dissertation. The Graduate School). Retrieved from http://cardinalscholar.bsu.edu/bitstream/handle/123456789/199826/JohnA_2015-3_BODY.pdf?sequence=1

Khan, M.H. (2014, March 30). Mother tongue: The dilemma of the Punjabi language. Daily Dawn. Retrieved from https://www.dawn.com/news/1096547

Majeed, F. (2016). Why is Punjabi viewed as an inferior language? Retrieved from https://blogs.tribune.com.pk/story/32485/why-is-punjabi-viewed-as-an-inferior-language/

Nazir, B. Aftab, U & Saeed, A. (2013). Language Shift – The Case of Punjabi in Sargodha Region of Pakistan. Acta Linguistica Asiatica, 3(2), 41-60. https://doi.org/10.4312/ala.3.2.41-60

Quad, ADJP. (2016). Research Tools: Interviews & Questionnaires. Retrieved fromhttps://lled500.trubox.ca/2016/225

Rahman, T. (1996). Language and politics in Pakistan. Karachi, Pakistan: Oxford University Press.

Rahman, T. (2002). Language, Power and Ideology. In Economic and Political Weekly, 37(44/45), 4556-4560. Retrieved from https://www.jstor.org/stable/4412816

Rahman, T. (2004). The Death of a Language. Retrieved fromhttp://www.fli-online.org/documents/sociolinguistics/death_of_a_language.htm

Raj, A. (2017, May 11) The case for Urdu as Pakistan's official language. Herald. Retrieved from https://herald.dawn.com/news/1153737

Roos, R. (2016). Language attitudes in the second langauge situations. PER LINGUAM VOL. 6 NO. 2.

RSTUDER, P., & KONSTANTINIDOU, L. (2015). Language attitudes and language proficiency of undergraduate students in English-medium instruction. source qui doit être utilisée pour toute référence à ce travail, 215-231.

Sheikh, Z.et.al. (n.d.). The constitution of Pakistan, 1973. Retrieved from https://pakistanconstitutionlaw.com/article-251-national-language/

Siddique, S. (2016, October 19). The desertion of Punjabi. The News. Retrieved from https://www.google.com.pk/amp/s/www.thenews.com.pk/amp/158151-The-desertion-of-Punjab.

Tahir, K. (2008). Punjab, Punjabi and Urdu, the Question of Displaced Identity: A Historical Appraisal. 14. Retrieved from https://www.researchgate.net/publication/237527758_Punjab_Punjabi_and_Urdu_the_Question_of_Displaced_Identity_A_Historical_Appraisal

Virinder, S. K.& Waqas M.B. (2013). In one hand a pen in the other a gun: Punjabi language radicalism in Punjab, Pakistan, South Asian History and Culture, 4:4, 538-553. DOI: 10.1080/19472498.2013.824682

Zaidi, A. (2010). A postcolonial sociolinguistics of Punjabi in Pakistan. Journal of Postcolonial Cultures and Societies. 1(3&4). Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.694.499&rep=rep1&type=pdf
https://www.quora.com/What-are-the-origins-of-the-Punjabi-language

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Examining the Self-Efficacy for Online Learning across Young and Old Age Students of Sindh

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Abstract
This paper presents the self-efficacy for online learning during the pandemic, across two age groups young (25 and below) and old (above 25) from different schools and universities in Sindh based on five constructs of self-efficacy. These constructs include completion of online courses, social interaction among students, academic interaction among students, interaction with instructors, and handling online tools of course management. This was a quantitative study with a web-based survey. The population of the study was school and university students of Sindh aging from 18 onwards and have taken online classes. The sample (n=162) was selected conveniently. And the data were gathered using an adopted questionnaire of self-efficacy for online learning (SeQoL) which has an excellent Cronbach's alpha value (0.947). The analysis was done by exploratory, descriptive, and inferential analysis. The study results reveal that the old group has shown higher (M= 3.07; SD= 0.57) self-efficacy for online learning compared to their younger counterparts (M= 2.72; SD= 0.54). The difference was found to be significant ($p<0.001$) with a medium magnitude ($r=0.321$). Therefore, the paper concludes that both age groups have a certain level of self-efficacy for online learning. However, the older students have higher self-efficacy than their counterparts. This study presents some limitations and recommendations for policy and practice levels and future studies.

Keywords: *Self-efficacy, Online learning, Self-efficacy for online learning, Self-efficacy of young and old students*

1. Introduction

COVID-19 has resulted in numerous shifts in several aspects including lifestyles and education (Coulthard, 2020). Thus, online learning became the only way to continue the teaching-learning process amid pandemics. Other than the pandemic, it is recommended globally (Gorder, 2018) and nationally (NEP, 2009) to integrate technology within the classroom and it has become a 21st-century requirement, to produce digitally literate individuals (Blair, 2012). Technology integration and learning with technology require certain confidence and motivation, which in short, is added to self-efficacy for teaching and learning with technology (Albion et al., 1999; Womble, 2007). Similarly, with time,

technology integration was broadened to online learning; which also required certain self-efficacy to continue and succeed, with online learning (Shen et al., 2013).

Self-efficacy has become one of the key characteristics that could anticipate effective online learning outcomes, including retention, observed learning, and student satisfaction (Alqurashi, 2019; Jan, 2015; Yukselturk et al., 2014). According to Bandura (1989), self-efficacy refers to the perceptions of people for their abilities to arrange and implement learned knowledge that is required to achieve desired outcomes. However, individuals with higher levels of self-efficacy seem to be more inclined towards their studies, perhaps increasing retention and lowering dropout rates. Hence, individuals with a high degree of self-efficacy have more perceived learning and are more satisfied with online classes (Chemers et al., 2001). However, the difference in self-efficacy is not found across age groups of young (including; school, college, and undergraduate level) and old age students (including; postgraduate, doctoral, and professional level). It is assumed that age and the level of learning have a direct relation to self-efficacy towards learning and achievement (Chu & Chu, 2010). Therefore, this study purports to examine the difference of self-efficacy among students of different age groups (young and old) for online classes. Whereby, the young group included school, college, and undergraduate level students with an estimate of age range 18-25 years, and old age included post-graduation, doctoral, and professional level students with an age range of 25 and above.

This study aims to examine the self-efficacy for online learning during pandemic across two age groups young (25 and below) and old (above 25) from different schools and universities in Sindh based on five constructs of self-efficacy. These constructs include completion of online courses, social interaction among students, academic interaction among students, interaction with instructors, and handling online tools of course management. Whereas, the research Question was (a). How do students' level of self-efficacy for online classes vary across young (25 and below) and old (above 25) age groups in the context of Sindh Pakistan? The hypotheses were:
(a). H_o: There is no difference between young and old students' levels of self-efficacy for online classes.
(b). H_{A1}: There is a difference between young and old students' levels of self-efficacy for online classes.
(c). H_{A2}: Young students have a higher level of self-efficacy than old students for online classes.

2. Problem Statement

Bandura (1986) defines self-efficacy as "beliefs in one's capabilities to organize and execute the courses of actions required to produce given attainments" (p. 3). According to him, self-efficacy is a belief of a person about how well he/she can perform a certain task to achieve certain goals. Self-efficacy can impact behavior, self-management, and motivation (Bandura & Locke, 2003). People with a high sense of self-efficacy are found to accept challenges and remain consistent in achieving their goals, whereas those with low self-efficacy quit early in the face of challenges (Bandura, 1977). In other words, it can be said that the level of self-efficacy determines one's preparedness for carrying out any task.

Furthermore, self-efficacy is critical to learning and performance therefore in a challenging learning environment i.e. online learning the presence or absence of self-efficacy plays an important role (Peechapol, 2018). Various researchers have explored that the current need and usability of an online learning environment emphasized the need for enhanced self-efficacy, as high levels of self-efficacy increase positive experience to a greater sense of learning opportunities in online education (Hong et al., 2017). Additionally, in online learning environments, the drop-out rate is higher compared to the face-to-face learning environment (Prior et al., 2016). This drop-out rate in the online learning environment can be reduced with the help of developing self-efficacy among all stakeholders surrounding the teaching and learning processes (Peechapol, 2018). Considering this, understanding the self-efficacy in online education is crucial and it can prove to be a key component of academic success in online education.

3. Research Methodology

3.1. Research Design

As the study aims to examine self-efficacy among students of different age groups (young and old) for online classes, it followed a quantitative approach which allows researchers to investigate, compare and quantify the characteristics and behaviors of people (Kleining & Witt, 2001). Under the quantitative paradigm, survey research has been used to define essential details of a group, statistically. Because it enables to investigate of the relationship between two or more variables (Kraemer, 1991). Also, it employs to receive personal opinions of people wherein the results can be extrapolated to the entire population. Thus, a cross-sectional survey design was employed to carry out this study since data were collected from a pool of students by using a survey questionnaire at one point in time (Owens, 2002).

3.2. Characteristics of the Sample

The targeted population of the study was students having aged above 18 and who have taken online classes. The research participants were recruited using the convenience sampling technique as it allows to reach the targeted population on a convenient basis (Sedgwick, 2013). Altogether, the sample of 162 participants was taken based on volunteer participation with informed consent. Table 1 illustrates the sample of the study.

Table. 1: Sample of Study

Student Gender		**Age Group**		**Institution**	
Male n (%)	Female n (%)	≤25 years n (%)	>25 years n (%)	University students n (%)	School students n (%)
62 (38)	97(60)	110 (68)	52 (32)	119 (73)	43 (27)

Evidently, female students were higher in number (n=97; 60%) as compared to male (n=63; 38%) counterpart. Furthermore, the percentage of students in the young age group that is less than and equal to 25 was higher (n=110; 68%) than in the old age group which includes participants having ages greater than 25 years (n=52; 32%). The comparison of

a number of research participants across institutions depicts that more university students (n=119; 73%) participated in the study than school students (n=43; 27%).

3.3. Data Collection Tool

A self-efficacy questionnaire for online learning (SeQoL) was adopted for the study which aimed to depict the complexities of online learning environments and the abilities required to succeed in such (Shan et al., 2013). There were 120 items in the initial item pool. Shen et al. used an 11-point Likert scale, with 0 indicating "cannot do" and 10 suggesting "can do". While the review of items from content specialists was completed, the chosen items were given to 406 online students (301 females, 104 males, and 1 not indicated) for piloting. In terms of the level of study, the participants were students of undergraduate (37%), graduate (60%), and other students (3%). Shen et al. (2013) discovered that 30 items evaluated five aspects of self-efficacy in online learning by using exploratory factor analysis. These dimensions are a) self-efficacy to complete an online course (8 items), b) self-efficacy to interact socially with classmates (5 items), c) self-efficacy to use course management system tools (6 items), d) self-efficacy to interact with instructors in an online course (5 items) and e) self-efficacy to interact with classmates for academic purposes (6 items). Cronbach's alpha was 0.93, 0.92, 0.93, 0.94, and 0.93 for each dimension, respectively. When the Cronbach's alpha for every domain was excellent, it depicted that the items in that domain consistently measure the same self-efficacy dimension.

Furthermore, SeQoL was analyzed by Tsia et al., (2020) based on psychometric properties. For this, different validities and confirmatory factor analyses were conducted. Though the tool was found to be valid and reliable for measuring self-efficacy for online classes (Tsia et al., 2020), 5-items from Shen et al.'s originally developed SeQoL were removed. This revised 4-point Likert scale (ranging from 1 – strongly disagree to 4 – strongly agree) SeQoL consisting of (25-Items) was adopted for this study. Table 2 depicts five constructs along with Cronbach's Alpha values.

This table illustrates that SeQoL was overall found to be reliable, as it has an excellent Cronbach's alpha (0.947). Additionally, the construct COC had the highest number of items (n=7) which intended to investigate learners' self-efficacy to meet course expectation and complete it timely and had an excellent Cronbach's alpha (0.865). On the other hand, construct HOT contained the least number of items (n=3) of items used for measuring learners' self-efficacy for handling course management tools such as initiating and contributing to a discussion, had an excellent Cronbach's alpha (0.879).

Table. 2: *SeQoL - Five Constructs*

Construct	**Example of Item**	**No. of Items**	Cronbach's Alpha
Self-efficacy to complete an online course (COC)	I was willingly adapting my learning styles to meet course expectations.	7	0.865
Self-efficacy to interact socially with classmates (SIC)	Apply different social interaction skills depending on the situation.	4	0.863
Self-efficacy to use course management system tools (HOT)	Post a new message on a discussion board.	3	0.879
Self-efficacy to interact with instructors in an online course (II)	Seek help from instructor when needed.	5	0.913
Self-efficacy to interact with classmates for academic purposes (AIC)	Effectively communicate with my classroom.	6	0.906
Overall		25	0.947

Moreover, construct SIC having 5-items was considered for measuring learners' self-efficacy to practice social interaction skills based on the requirement of the situation, which was excellent in terms of Cronbach's alpha (0.863). Also, construct II having 5 items, pondered to measure learners' self-efficacy to interact with instructors in an online course either for seeking help or sharing concerns/opinions, had an excellent Cronbach's alpha (0.913). Additionally, construct AIC having 6-items was intended to measure learners' self-efficacy to effectively communicate with classmates for academic purposes, also had an excellent Cronbach's alpha (0.906). Altogether, SeQoL was an excellently reliable tool for consistently measuring learners' self-efficacy for online classes.

3.4. Data Collection

This was a web-based survey, where the tool (SeQoL) was generated on Google forms because it is user-friendly and can easily be accessible. That link of Google forms was circulated among peers and faculty members. So that, the link was shared by all the peers and faculty among students of Sindh including schools and universities of both public and private sectors via social media apps (i.e., emails, WhatsApp, and Facebook). It contained some predetermined instructions and consent for voluntary participation along with the aim of collecting data, which makes it more self-explanatory for participants. It took about 10-days to collect the targeted number of responses.

3.5. Analytical Strategies

The data were analyzed employing the Statistical Package of Social Science (SPSS, 23).

3.5.1. Data Importing

The collected data were in Google sheets, which were later imported into SPSS. For this, some of the demographics (gender, level of study, and institutions) along with age group as independent and self-efficacy as dependent variables were predetermined. These variables were coded; gender (0 for male and 1 for female), level of study (1 for school and 2 for university), institutions (1 for government and 2 for private), and age (1 for young and 2 for old).

3.5.2. Data Cleaning

The data obtained from research participants were cleaned by running frequencies. No major errors were found in the data.

3.5.3. Exploratory Analysis

As the data was error-free, the following two steps were undertaken i.e. (a). Computing New Variables: The first step of the exploratory analysis was computing new variables. In this, the overall/total (OSE_Total) mean of self-efficacy, followed by, the mean of each construct (COC, SIC, HOT, II, and AIC) was calculated; and (b). Checking Assumptions: The second step of the exploratory analysis was checking the assumptions of parametric tests (i.e., independent sample T-test). In this, the first assumption was "outcome variable should be continuous". This assumption was fulfilled; as self-efficacy was measured on a scale. The second assumption which is "normality of data across two groups" was checked by calculating skewness. Table 3 presents the normality of the data.

3.5.4. Descriptive Statistics

Descriptive analysis was employed to compute mean and standard deviation of both young and old age groups were calculated in SPSS.

3.5.5. Inferential Statistics

As the second assumption of parametric test (i.e., independent sample T-test) was not fulfilled. The alternative which is Mann-Whitney U test (non-parametric test) was chosen. It was performed through SPSS along with computing the effect size by using the formula ($\boldsymbol{r = \frac{z}{\sqrt{n}}}$).

Table. 3: *Normality Table*

Name of Construct	Value of Skewness		Comment	
	Young	Old	Young	Old
Overall OSE	-0.33	-1.30	Normal	Skewed
COC	-0.29	-1.47	Normal	Skewed
SIC	-0.27	-0.66	Normal	Skewed
HOT	-0.51	-0.98	Normal	Skewed
II	-0.37	-0.87	Normal	Skewed
AIC	-0.46	-0.77	Normal	Skewed

Table 3 revealed that the data of the young group was normal. However, it was slightly negatively skewed in the old group. Thus, the second assumption of normality was not met to employ a parametric test (i.e., independent sample T-test). Therefore, the non-parametric test (Mann Whitney U test) was used.

4. Results and Discussion

The results revealed that self-efficacy of the old group is higher than the younger group. Table 4 illustrates the results of differences in self-efficacy for online learning across age groups.

Table. 4: *Self-efficacy Comparison across age Groups*

Constructs	Young Group Mean (SD)	Old Group Mean (SD)	Differences	Magnitude of difference
Overall	2.72 (0.54)	3.07 (0.57)	U = 1721.000; z= 4.088; p< 0.001	r = -0.321
COC	2.66 (0.59)	3.08 (0.58)	U = 1563.500; z= -4.666; p< 0.001	r = -0.366
SIC	2.55 (0.76)	2.76 (0.75)	U = 2357.500; z= -1.814; ns	
HOT	2.88 (0.82)	3.35 (0.69)	U = 1863.000; z= -3.643; p< 0.001	r = -0.286
II	2.73 (0.78)	3.10 (0.65)	U = 1987.000; z= -3.156; p< 0.002	r = -0.248
AIC	2.82 (0.66)	3.08 (0.74)	U = 2161.500; z= -2.518; p< 0.012	r = -0.197

The results revealed that the old group has demonstrated higher (M=3.08; SD=0.58) self-efficacy for completing online courses as compared to the younger group (M= 2.66; SD=0.59). The data seem to be less spread among both groups with a slightly higher dispersed in old than young age group. The difference was found to be significant (p<0.001] with a medium magnitude (r= -0.366). Most of the older students appeared to be able to successfully adapt to online classrooms by grasping complicated ideas, assuring timely submission of assignments, and meeting the expected learning targets and outcomes.

On the other hand, the old group has demonstrated slightly higher (M=2.76; SD=0.75) self-efficacy for social interaction with classmates as compared to the younger group (M=2.55; SD=0.76). Here, the spread seems to be a bit high in both groups with a slight high in the young group. The difference was not found to be significant (p>0.005). Here, both the young and the old were able to engage in social interactions that were contextually relevant. It favored both groups in general, with the old group having a little advantage because they portrayed an amiable relationship with their peers.

Besides, the old group has demonstrated higher (M=3.35; SD=0.69) self-efficacy for handling online course management tools as compared to the younger group (M=2.88; SD=0.82). The scores of the young group seem to be more spread than the old group. The

difference was found to be significant ($p<0.001$) with a medium magnitude ($r= -0.286$). The inferences that may be formed here are considerably more in favor of the old group pupils since they show slightly more skill in handling the virtual learning environment. The students in the old groups were able to exchange emails and participate in virtual learning platforms, a powerful kind of online education that allows students to discuss key topics and share their knowledge.

Likewise, the old group has demonstrated higher ($M=3.10$; $SD=0.65$) self-efficacy for interacting with instructors as compared to the younger group ($M=2.73$; $SD=0.78$). The scores seem to be more spread in the young than the old group. The difference was found to be ($p<0.002$] with a slightly small magnitude ($r= -0.248$). As students from both old and young groups participated in the course, online contact between students and course instructors was an issue. It is worth noting, however, that a little difference has revealed a difficulty in obtaining advice from course teachers as well as in telling them of any urgent situations in a timely and appropriate manner.

Moreover, the old group has demonstrated higher ($M=3.08$; $SD=0.74$) self-efficacy for academic interaction with classmates as compared to the younger group ($M=2.82$; $SD=0.66$). Here, the scores seem to be more spread in the old group than young. The difference was found to be significant ($p<0.012$) with a small magnitude ($r= -0.197$). The exhibited scores of both the old and young groups of students revealed a lack of synchronization among classmates, with genuine concerns about retaining self-respect while engaging in meaningful dialogues and extending assistance to one another.

The overall comparison demonstrated that the old group has shown higher ($M= 3.07$; $SD= 0.57$) self-efficacy for online learning as compared to their counterparts in the younger group ($M= 2.72$; $SD= 0.54$). The scores of the older group seem to be more spread than the younger group. The difference was found to be significant ($p<0.001$) with a medium magnitude ($r=0.321$). On a broad level, it may be concluded that students in both age groups (old and young) were capable of making a seamless transition to online learning. The old students had stronger self-efficacy to complete online courses through connecting socially and academically with their classmates, as evidenced by their scores on the five dimensions depicted on the five-point Likert scale. When it came to academic interactions with the lecturer and classmates, the difference was minor.

Furthermore, Table 5 demonstrated that the self-efficacy among the old group is higher than that of the younger group. However, self-efficacy in terms of its constructs is found to be higher in completing online courses within a time frame along with reaching to desired learning outcomes. It shows the consistency of old-age students to remain focused on achieving desired outcomes while completing courses timely. Additionally, the self-efficacy for handling online tools was found to be greater in old as compared to young. This could be due to having more exposure of using academic-related online tools among the old than the young. Besides this, the older group seems to be more self-efficient in seeking guidance from the course instructors as well as informing them about any immediate situation timely and in an appropriate manner than the young group. On the other hand, both groups presented a lack of coordination among their classmates with the

apprehensions of maintaining self-respect while making meaningful discussions and offering help to each other. As old group of students is found to be having a higher level of self-efficacy for online learning than the young group, the null hypothesis (H_o) and alternative hypothesis (H_{A2}) are rejected.

The key findings of this study revealed that old-age students are more self-efficient in terms of continuing with online learning platforms, along with having a proper interaction with instructors and peers for both academic and social purposes and handling digital tools. The results coincide with Jan (2015), she also found that the upper age group students showed consistency with continuing and achieving their desired learning outcomes, in an online learning platform, with having self-efficacy for academic, computer, and online learning. The findings are also consistent with the findings of Okello (2021), revealing that students above the age of 25, have a higher self-efficacy for online learning with a high effect size (0.72).

However, the young age group is more prone to technology use in their daily lives, and is assumed to be more self-efficient with online learning but is found less self-efficient in online learning. It raises the question of *why old ones are self-efficient and not young ones.?* It could be due to the fact that age brings maturity, and students with an increase in age realize their responsibility of independent learning or learning by themselves, whereas the young age group could be dependent on teachers and/or institutions for enabling them to learn (Saeid & Eslaminejad, 2017), thus, leading to the difference in self-efficacy among both groups.

Additionally, a more personal trait can also be highlighted that the young age group students, sometimes show careless and non-serious attitudes toward learning, as their long-term goals are less likely set. However, relatively, old age students, are more serious about achieving certain predetermined goals of theirs, either in terms of degree completion to achieve long-term goals or for professional learning for promotions. Having said that, with a pre-set goal, people from any age group can have a higher self-efficacy for learning, in general, and for online learning, particularly (Fritea, 2015).

Interestingly, this very element of technology prone is associated with the preferable purposes for the use of technology (Margaryan et al., 2011). Whereby, the young age group is more likely involved in using technology for communication, networking, and entertainment purposes, thus, their quantitative technology use is not enough to support online learning, contrarily, those students [old age group] being involved in more of academic and professional use of technology, tend to be more self-efficient in online learning, that is evident from the findings of this study as well.

5. Conclusion

Concluding, considering the transition of educational activities to virtual learning platforms during pandemics, this study examined the self-efficacy for online learning among young and old-age students. It found that both groups had a certain level of self-efficacy for online learning. However, the old age group was found to be having more self-efficacy than the younger group. Though the difference between both groups is

mediocre, it is significant. The difference could be due to the academic and professional attributes of both groups along with the preferable frequent use of technology and possessing short and/or long-term goals. Therefore, with these findings, this study suggests that for ensuring the effectiveness of online learning, the instructors and institutions need to work on students' self-efficacy which directly affects students' academic achievement.

6. Limitations and Recommendations

Certainly, this study is limited to the context of Sindh only. Also, only focuses on self-efficacy across age groups. Besides, it is also limited for generalizability, as the data were collected using non-probability (convenient) sampling.

6.1. For Policy and Practice

This study has certain recommendations for policy and practice levels. It recommends policy makers to include productive integration of ICTs in education policy and curriculum along with ensuring the proper professional development of teachers from educational technology experts and tools. Also, it recommends designing ICTs integration with respect to different content areas, based on the relevance and nature of the topic, where technology can be integrated productively. Likewise, learning management systems need to be built in educational institutions along with proper orientation for both instructors and students to ensure its productive application integrated with day-to-day classroom tasks.

6.2. For Future Studies

However, it should be done in other contexts as well to explore self-efficacy for online learning. Also, the whole nationwide study should be conducted for investigating self-efficacy along with factors affecting it among students and a comparative study across different provinces should be done. Whereas it is recommended to explore other factors including gender, level of study, sectors of institutions, and contexts/regions of Pakistan. Thus, the probability sampling technique is recommended which would allow for generalizing the results to a larger population. Moreover, a similar sort of study needs to be conducted either with mixed-method or qualitative approach to explore the supporting and hindering factors behind greater and lower self-efficacy for online learning.

7. References

Albion, P. R. (1999). Self-efficacy beliefs as an indicator of teachers' preparedness for teaching with technology. In *Society for Information Technology & Teacher Education International Conference*, 1602-1608. Association for the Advancement of Computing in Education (AACE).

Alqurashi, E. (2019). Predicting student satisfaction and perceived learning within online learning environments. *Distance Education*, *40*(1), 133-148. https://doi.org/10.1080/01587919.2018.1553562

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychologicalreview*, *84*(2), 191.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, *37*(2), 122.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of applied psychology*, *88*(1), 87.

Blair, N. (2012). Technology integration for the new 21st century learner.

Chemers, M. M., Hu, L. T., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55-64. https://doi.org/10.1037/0022-0663.93.1.55

Chu, R. J., & Chu, A. Z. (2010). Multi-level analysis of peer support, Internet self-efficacy and e-learning outcomes–The contextual effects of collectivism and group potency.*Computers & Education*, *55*(1), 145-154.

Fritea, R. (2015). Enhancing situational interest, perceived utility, and self-efficacy in online learning. An instructional design intervention. *Cognitive, Career, Comportment/ Cognition, Brain, Behavior*, *19*(4).

Gorder, L. M. (2008). A study of teacher perceptions of instructional technology integration in the classroom. *Delta Pi Epsilon Journal*, *50*(2).

Hong, J. C., Hwang, M. Y., Tai, K. H., & Lin, P. H. (2017). Intrinsic motivation of Chinese learning in predicting online learning self-efficacy and flow experience relevant to students' learning progress. *Computer assisted language learning*, *30*(6), 552-574.

Jan, S. K. (2015). The relationships between academic self-efficacy, computer self-efficacy, prior experience, and satisfaction with online learning. *American Journal of Distance Education*, 29(1), 30-40. https://doi.org/10.1080/08923647.2015.994366

Kleining, G., & Witt, H. (2001, February). Discovery as basic methodology of qualitative and quantitative research. In *Forum Qualitative Social for schooling/Forum: Qualitative Social Research* (Vol. 2, No. 1).

Kraemer, K. L. (1991). Introduction. Paper presented at The Information Systems Research Challenge: Survey Research Methods.

Margaryan, A., Littlejohn, A., & Vojt, G. (2011). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & education*, *56*(2), 429-440.

NEP. (2009). *National Education Policy.* Ministry of Education, Government of Pakistan.

Okello, L. M. (2021). Students' Self-Efficacy and Challenges to Virtual Classes: A Conceptual Integrated Model of Rongo University-Kenya During COVID-19 Pandemic.

Owens, L. K. (2002, January). Introduction to survey research design. In *SRL fall 2002 seminar series 1*.

Peechapol, C., Na-Songkhla, J., Sujiva, S., & Luangsodsai, A. (2018). An Exploration of Factors Influencing Self-Efficacy in Online Learning: A Systematic Review. *International Journal of Emerging Technologies in Learning*, *13*(9).

Prior, D. D., Mazanov, J., Meacheam, D., Heaslip, G., & Hanson, J. (2016). Attitude, digital literacy and self-efficacy: Flow-on effects for online learning behavior. *The Internet and Higher Education*, *29*, 91-97.

Saeid, N., & Eslaminejad, T. (2017). Relationship between Student's Self-Directed-Learning Readiness and Academic Self-Efficacy and Achievement Motivation in Students.*International Education Studies*, *10*(1), 225-232.

Seeram, E. (2019). An overview of correlational research. *Radiologic technology*, *91*(2), 176-179.

Sedgwick, P. (2013). Convenience sampling. *Bmj*, *347*.

Shen, D., Cho, M. H., Tsai, C. L., & Marra, R. (2013). Unpacking online learning experiences: Online learning self-efficacy and learning satisfaction. *The Internet and Higher Education*, *19*, 10-17.

Womble, J. C. (2007). *E-learning: The relationship among learner satisfaction, self-efficacy, and usefulness*, 1-132. Alliant International University, San Diego.

Yukselturk, E., Ozekes, S., & Türel, Y. (2014). Predicting dropout student: An application of data mining methods in an online education program. *European Journal of Open Distance E-Learn*, 17(1), 118–133. https://doi.org/10.2478/eurodl-2014-0008

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