



TO STUDY THE EFFECT OF SOCIAL MEDIA ON THE LEARNING ABILITY OF SECONDARY SCHOOL STUDENTS

RASHMI SRIVASTAVA and ANANT KUMAR SRIVASTAVA

Research Scholar, Department of Teacher Education

Sam HigginBottom University of Agriculture, Technology and Sciences

Assistant Professor (SFMC), Sam HigginBottom University of Agriculture, Technology and Sciences

Abstract- Social media is an ingrained part of today's society. Students are using various social media such as Instagram, Facebook, Twitter, Youtube, and many other sites at every moment of their life. Definitely, social media is affecting the learning abilities and academic achievement of students. Learning abilities are basically how students perceive and understand the concepts and how they are applying the concept in their real life. This research tries to examine the effect of social media on the learning ability of secondary school students. How the variables are correlated to each other? This research was conducted in Prayagraj on secondary school students. The research design was a descriptive survey. The sample size was 500 secondary school students coming from both rural and urban locales, out of which 226 were girls and 274 were boys. Stratified random sampling techniques were used. Tools used in this research were verbal intelligence constructed by Dr. R.K. Ojha and K. Choudhary. For social media usage researcher constructed the questionnaire on 5 points Likert scale and was standardized. The reliability of the tool was calculated through split-half techniques major findings of the study are- 1. There is a significant difference in the usage of social media between the boys and girls at the secondary school level. 2. There is a significant difference in the use of social media between the rural and urban students of secondary school level. 3. There is a significant difference in the learning abilities between boys and girls of secondary school level. 4. There is a significant difference in the learning abilities between the rural and urban students of secondary school level. There is a positive correlation between social media and the learning ability of secondary school students.

Key words- Social media, Learning ability, Secondary school students.

Introduction

The phrase "social media" refers to websites and software programs that emphasize interaction, sharing of material, collaboration, and community-based feedback. In order to stay in contact, people use social media to interact with their friends, family, and other communities. Social media applications are used by businesses to market their goods, spread the word about them, and monitor client complaints. Social media, in its broadest sense, refers to a group of interactive Internet applications that make it easier for people to create, curate, and share user-generated content (either individually or collaboratively). There are several varieties of social media platforms

Historical background

In 1997, the first well-known social networking website went live. Users could make profiles, list friends, and, starting in 1998, browse the friend lists on SixDegrees.com. In fact, all of these characteristics had existed under a specific capacity prior to SixDegrees. On most popular dating sites and numerous community websites, there were profiles. Though the Friends were hidden from other users, the Friends lists were supported by AIM and ICQ buddy lists. SixDegrees marketed itself as a tool for facilitating communication and message sending. Even though SixDegrees gained millions of members, the service was shut down in 2000 because it was unable to maintain itself. SixDegrees' creator thinks that looking back, it was merely an avant-garde idea (A. Weinreich, personal communication, July 11, 2007). Although individuals were already using the Internet in large numbers, the majority did not have large online buddy networks. Early adopters bemoaned the lack of activities available after approving Friend requests and even the lack of interest in starting conversations among most users.

The second generation of SNSs began with Ryze.com. It was created in 2001 in order to help people in maximizing their connections. The inventor of Ryze claims that he originally shared the website with his acquaintances, mainly those in the San Francisco technical and business scene, such as the founders and backers of several upcoming SNSs. In particular, there was a close private and organizational connection between the individuals behind Ryze, Tribe.net, LinkedIn, and Friendster. They thought they could complement each other's efforts without competing. In the final moment, Ryze was never widely adopted, Tribe.net expanded to draw a fervent niche base of users, LinkedIn developed into an effective business tool, and Friendster emerged as the most significant, even if only as "one of the biggest disappointments in Internet history." (Boyd & Ellison, 2007)

Although there were social networks before Friendster, none of them were as successful in reaching the general public. Meeting people was made less daunting and very addicting by a feature that displayed how you were linked to strangers. Online dating was also seen as a secure method of meeting people. The site had several technical issues since it couldn't grow the service quickly enough to keep up with demand. Users who were dissatisfied started switching from the well-known social network to its competitor MySpace. The business is still recognized with sparking the current social media boom. The website stopped using user profiles in May 2011 and changed to a social entertainment platform.

Reid Hoffman, Allen Blue, Konstantin Guericke, Eric Ly, and Jean-Luc Vaillant founded LinkedIn in May 2003. A website for professional networking is called LinkedIn. It enables you to make a profile that highlights your achievements and areas of expertise in the workplace. It helps to strike up relationships with other experts, and the network increases with time. The network connects you to a large number of professionals and experts through your connections, your connections' connections, and the people they know .

Hi5 became a SNS in June 2003, and within a year it was making money. Ramu Yalamanchi created the website, which became well-known in Latin American nations as well as Mongolia, Tunisia, and Romania. Hi5's traffic peaked in 2007 and it was second only to MySpace.

Myspace was initially established by Tom Anderson and Chris DeWolfe in July 2003 as an online community where anybody could join and share their diaries, photos, music, and hobbies with others. It was worth at \$12 billion in 2007, is well-known for its band pages, editable profiles, and culture of online stalking.

In 2002, Friendster was launched. The main goal was to compete with Match.com, a dating website. While many dating websites focus on connecting people with others who share their interests, Friendster was created to facilitate the introduction of friends-of-friends. It was understood that dates with friends-of-friends would be more meaningful than those with completely random people. Users may make contact with other people, maintain those relationships, and exchange recordings, photos, and messages.

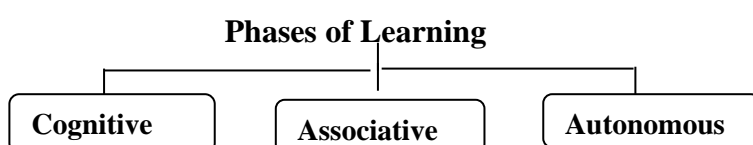
Mark Zuckerberg created Facebook in February 2004; it quickly became one of the most contentious websites in history. The website was previously only accessible to Harvard students before it was subsequently made available to everyone in September 2006. Facebook allows users to create an online profile for themselves, gather "friends" who may comment on other people's pages and read each other's profiles. In addition, Facebook users may discover which classes they share, join virtual groups based on shared interests, and see one other's profiles to discover their shared musical preferences, hobbies, and status in love relationships. (Ellison et al., 2007)

Yahoo! 360 Degrees debuted exclusively by invitation in March 2005. Users were able to publish photographs from Yahoo! Photos, exchange blogs and lists, build and share public profiles, and discover who was online at the moment among their friends. Additionally, 360° included a part called "Friends Updates" that provided a quick summary of each friend's most recent news. Yahoo! prematurely halted this service's development in 2008, hence it was never formally released.

As of September 2012, Google+ had amassed a registered user base of more than 400 million after being introduced by Google Inc. in June 2011. Google+ offers some features that, despite sharing many characteristics with Facebook and being somewhat similar to it, may persuade both seasoned Facebook users and those who have never used a social networking site to choose Google+ as their main social networking platform.

Social media has become an indispensable part of learning. Somewhere it has enhanced the quality of learning. It helps make learning more easily and helps clear the concepts. Social media helps in better retention of concepts. It has advanced educational technology. It has introduced a unique learning approach. Learning plays a vital role in one's personality. Almost every day what we do is the result of our past experiences. Learning is more than our thinking. It provides a key structure to our behavior and personality. It is right to say that learning starts from the womb and ends at the tomb. Learning is a lifelong and continuous process. Experiences, direct or indirect somewhere help in molding and shaping our behavior from the very beginning. For instance, barking dogs seldom bite, green apples are sour, be very cautious in believing strangers, etc. All these conclusions derived from experiences either direct or indirect bring about a change in the behavior of an individual. These changes in behavior are commonly termed learning.

Phases of learning: when we learn anything we pass through three stages. How we learn as individuals (i.e. auditory, visually, kinesthetic) will affect our performances. When learning any new skill, we may transit through one, two, or all three stages. It will depend on various factors like our commitment to learning, the capability of the learner, previous experience of the learner, how well it is taught, and how often we are exposed to the new skill.



Let us briefly discuss the three phases of learning.

1. **Cognitive:** whenever a learner is exposed to a new skill, there may be a number of mistakes in his work. Initially, new learners make a number of mistakes in comparison to experienced learners. It takes time for the

individual to process the new information he remains in the cognitive stages but with practice, the number of errors will decrease and the learner reaches the associative stage.

2. Associative: as the word suggests, the learner begins to associate a skill with the visual or verbal cues being given by the teacher or instructor and this enables him to react more efficiently and quickly. There are many times when learners find problems in recalling all the combinations but their learning process is taking hold and this generally means lesser errors and move to the next stage.

3. Autonomous: the aim or goal of a learner is to reach the autonomous stage where with small hints from a teacher or instructor they can perform or eliminate their error by themselves. Basically, this stage shows the success of any learner.

The key to this is that learners continue practicing and their basic skills are automatically understood, enabling them to “connect the hints” of the complex problems and become experienced learners.

Dimensions of learning- Learning, according to certain theories, is an organic process that evolves in complicated ways at its own pace and rhythm. As a result, each student learns in a unique way. Each student will be accommodated uniquely by a best practice for learning assessment (i.e. grading). By allowing students to capture evidence of their own improvement in many areas, the Learning Record forces students to pay attention to their own learning styles. These domains will be referred to as the **Dimensions of Learning**.

The six dimensions that follow cannot be separated from one another; rather, they are inexorably linked to one another.

1. INDEPENDENCE AND CONFIDENCE

When learners' confidence and independence match their real talents and skills, content knowledge, use of experience, and reflectiveness about their own learning, we witness progress and development. It's not as simple as saying "the more (confidence and independence), the better." When confronted with a challenge, for example, an overconfident student who has depended on flawed or underdeveloped skills and methods learns to seek help; or a shy student learns to trust her own abilities and insist on presenting her own point of view in conversation. In both circumstances, pupils are growing in terms of self-assurance and independence.

2. STRATEGIES AND SKILLS

The "know-how" part of learning is represented by skills and techniques. When we talk about "performance" or "mastery," we're referring to the development of abilities and tactics that allow learners to function successfully in certain contexts. Skills and strategies are not only unique to certain fields, but they also frequently span them. In a writing class, for example, students gain many specialized skills and tactics involved in producing and communicating successfully, from research to concept development to organization to polishing grammar and correctness, and sometimes integrating technological abilities for internet communication.

3. KNOWLEDGE AND UNDERSTANDING

Knowledge and understanding refer to the “content” knowledge learned in particular subject areas. The most familiar dimension is knowledge and understanding, which focuses on the "know-what" part of learning. Knowledge and comprehension might be used to answer a variety of subject questions in our class, such as: What is Foucault's concept of the author? What exactly is "pathos"? These are common content-related inquiries. What students learn about the themes, research methods, theories, conceptions, and practices of a discipline, the methods of organizing and expressing our ideas to others, and so on are all covered in such classes. This has to do with the course's unique subject as well as the rhetorical and writing techniques we'll be practicing.

4. APPLICATION OF PREVIOUS AND NEW EXPERIENCE

Learners' skills to draw on their own experience and connect it to their work are required for the utilization of prior and emerging experience. The ability to employ old knowledge as well as fresh experience in new settings is an important but frequently overlooked aspect of learning. To account for the development of this key talent, which is at the heart of creative thinking and its application, it is vital to observe learners throughout time while they engage in a variety of activities. We can't find out how a student's prior experience can be used to assist

construct new understandings, or how ongoing experience influences the subject knowledge, abilities, and strategies the learner is acquiring using standard ways of evaluating learning. Students in this class scaffold new knowledge by applying previously taught principles and procedures to each new assignment; the sequence of the tasks is determined by the ability to apply past knowledge and deepen the learning of new skills.

5. REFLECTION

Reflection refers to the developing knowledge of the learner's own learning process, as well as more analytical approaches to the material being studied. We aren't talking about reflection in the sense of reverie or abstract introspection when we say it's an important part of learning. We're talking about the learner's ability to take a step back and analyze a situation critically and analytically, as well as gaining insight into his or her own learning processes, which is known as meta-cognition. It gives the "broad picture" in exchange for the specifics. Students in a history class, for example, who are examining fragmentary documents and researching an era or event, use reflection to find patterns in the evidence and build a historical narrative. Learners must acquire this skill in order to apply what they've learned in different situations, recognize the constraints or barriers they'll face in a new circumstance, make use of their existing knowledge and experience, and improve their own performance.

6. IMAGINATION AND CREATIVITY

As learners develop confidence and independence, knowledge and understanding, skills and techniques, ability to use prior and emerging experiences in new settings, and reflectiveness, they generally become more playful and adventurous and more creative in the expression of that learning. This is true not only in "creative" disciplines like the arts, but in almost all fields: research, debate, history, and psychology, to name a few. In every subject, the fundamental contributions are the product of innovative or creative labor. This optional dimension is used to emphasize the importance of creativity, originality, and imagination in the development and achievement of students. It respects the significance of creative exploration, even if the end outcome may not be as successful as the original idea.

Every child is unique in himself. Every child has a different ability to learn things. All the children cannot be taught from one method. The ability of a child to recall, use the learned knowledge in any situation, be able to comprehend, memory, problem-solving, etc is called learning ability.

To expand the knowledge it is important to retain things. According to one study, it was found that 75% of people have an eidetic memory and very few people are lucky to remember things effortlessly through multiple methods. Many people begin to study but in the end, half of the things will be remembered which they have studied. Most of us spend hours on hours in studies but we are unable to remember the majority. There are many studies that show that people have different preferences for learning and our brain can remember most which is based on the strongest learning ability.

Learning models are given by various psychologists.

Fleming VARK model of learning: When Fleming changed the VAK model to create the VARK learning style model in 2006, it was a new learning style. By assigning pupils to one of four alternative modes, this learning style is adjusted. The names of the several modes—visual, auditory, reading, and kinesthetic—and the model itself—come from the prefix letters for those senses (V, A, R, and K). Ismail (2010) asserts that grouping students by learning style are essential for assessing how well each session corresponds to the various VARK learning modes. According to Fleming, kids learning in the auditory modality prefer to learn through conversation and listening. These children are able to comprehend and understand printed information when reading. The pupils are more likely to embrace learning through the interpretation of graphs, charts, and images when it is presented in a visual format. In contrast, the kinesthetic learning mode tends to accept learning based on actions like touching, feeling, seeing, and listening.

Kolb's learning style model - The two dialectics of action/reflection and experience/abstraction are resolved in the ELT, which is a dynamic perspective of learning based on a learning cycle. The process by which information is constructed by transforming experience is known as learning. According to Kolb understanding and transformation of experience work together to produce knowledge. Taking in knowledge is referred to as "grasping experience," and how people understand and use that knowledge is referred to as "transforming experience."

There are two quanta in Kolb's learning styles. The east-west axis is called the processing continuum and the north-south axis is called the perception continuum. The east-west axis represents how we approach any problem or any situation. The north-south axis represents our emotional response or how we feel or think about it. It can also be called a two-by-two matrix. Each learning style is a combination of two preferred styles.

In Kolb's, there are four learning styles i.e. accommodating, diverging, assimilating, and converging. It can be seen through the matrix:

Table 1.1: Kolb's learning style

	Active experiment (doing)	Reflective observation (watching)
Concrete experience (feeling)	Accommodating (CE/AE)	Diverging (CE/RO)
Abstract conceptualization (thinking)	Converging (AC/AE)	Assimilating (AC/RO)

Initiating style- involves taking the initiative to deal with situations and experiences. The ability to take the initiative to act in response to experiences and circumstances defines the initiating style. Active experimentation (AE) and concrete experience are included (CE).

Experiencing style- is characterized by a keen interest in experience as a source of meaning. The ability to derive meaning from intense immersion in experience is what distinguishes the Experiencing style. It balances active experimentation (AE) with the introspective observation while drawing on concrete experience (CE).

Imagining style- involves speculating about potential outcomes while watching and considering past events. The ability to envision possibilities via observation and reflection on experiences is what defines the Imagining style. It combines the learning processes of reflective observation and concrete experience (CE).

Reflecting style- involves connecting experience and concepts over time. The ability to link experience and ideas through extended reflection defines the Reflecting style. While balancing concrete experience (CE) with abstract conceptions, it makes use of reflective observation (RO) (AC).

Analyzing approach- involves using reflection to integrate concepts into clear models and systems. The Analyzing style is defined by the capacity to integrate and organize concepts via thought. It combines abstract conceptualization with reflective observation (RO) (AC).

Thinking style- involves systematic engagement in logical and abstract reasoning. The ability to engage in systematic, logical thinking is what distinguishes the Thinking style. In addition to active experimentation (AE) and reflective observation, it makes use of abstract conceptualization (AC) (RO).

Deciding style- involves choosing problem-solving strategies and courses of action utilizing theories and models. The capacity to make decisions about issue solutions and actions to be taken using theories and models is what defines the Deciding style. It integrates active experimentation (AE) with abstract conceptualization (AC) (AE).

Acting style- integrates people and tasks while providing a significant incentive for goal-directed activity. A strong drive for the goal-directed activity that incorporates people and tasks defines the acting style. It

incorporates active experimentation (AE) while achieving a balance between a concrete experience (CE) and abstract conception (AC).

Balancing style- involves adjusting by considering the benefits and drawbacks of acting in comparison to pondering and experiencing in comparison to thinking. The capacity to adjust and assess the advantages and disadvantages of acting vs reflecting and experiencing versus thinking are characteristics of the balancing style. It strikes a balance between direct experience, intellectual abstraction, practical experimentation, and introspective observation.

Herrmann brain dominance model (whole brain development model)- Numerous ideas focused on the brain and sought to explain how thinking happens. For instance, Mc Clean presented the triple-brain hypothesis in 1952, proposing three interfering brains—the rational, intermediate, and primitive brains—in each of which thought occurs in a certain fashion. Conversely, Sperry postulated a two-chamber brain in 1964, with a left brain and a right brain, where certain types of thinking take place (Herrmann, 1988). , Herrmann created the Whole Brain Theory, which was based on the Mc Clean and Sperry hypothesis. According to the Theory, the brain was split into upper left/right and lower left/right regions based on how one thinks. The top region of the brain is primarily responsible for conceptual and abstract thought. While the lower half of the brain is exclusively responsible for emotional and visceral functions.

Similar to how the lower left brain is structured and sequential; the upper left brain is logical and quantitative. While the lower right brain is social and emotional, the upper right brain is logical and visual. The left side of the brain is rigidly organized, whereas the right part of the brain appears to be loosely formed. First, there is the external thinking style (QA), which Herrmann described as fact-based, analytical, logical, theoretical, or external. The second style, the procedural thinking style (QB); is characterized as a procedural thinker, focused or controlled, planned or organized, sequential or procedural. The third type of thinking style is referred to as interactive thinking style (QC), and it is emotive, sociable, interpersonal, and feeling-based. The fourth and final thinking type is the internal thinking style (QD), which Herrmann characterizes as intrinsic, open-minded, inventive, integrative, analytical, and creative.

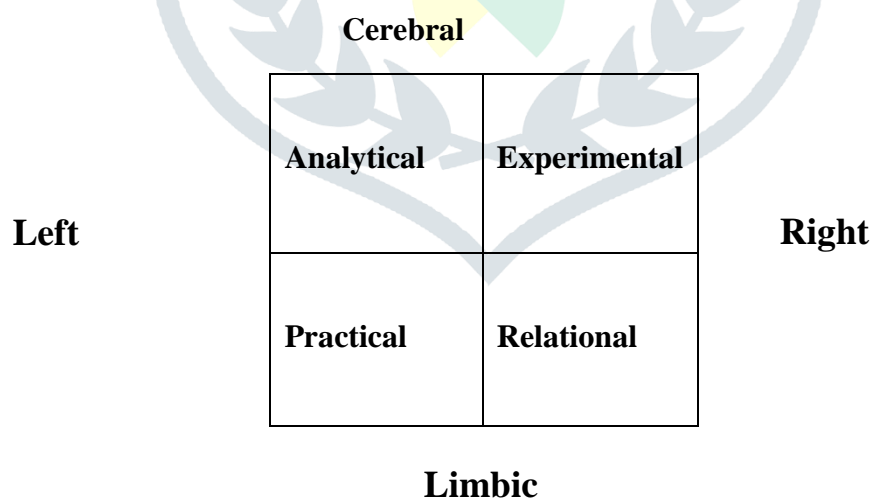


Fig. 1.1 Herrmann learning style

Gregorc Learning Style- Anthony Gregorc is the name that is associated with the study of human consciousness and self-awareness. He is best known for his work on learning style. He started working on this project in 1969. His work got recognition in 1984. The learning model is called the mind style model. The main concept of his model is how our brain learns and how it thinks. An assessment, The Gregorc Style Delineator was made to know the learning preferences of an individual.

He asserts that each and every person has two mediation skills. Perception and other is ordering. In its simplest form, perception refers to how one understands or interprets the data. Either tangible or abstract characteristics of perception exist. What is meant by the order is how information is arranged. Ordering can be either random or logical. The graphical representation of Gregorc's mind style model is similar to Kolb's learning style.

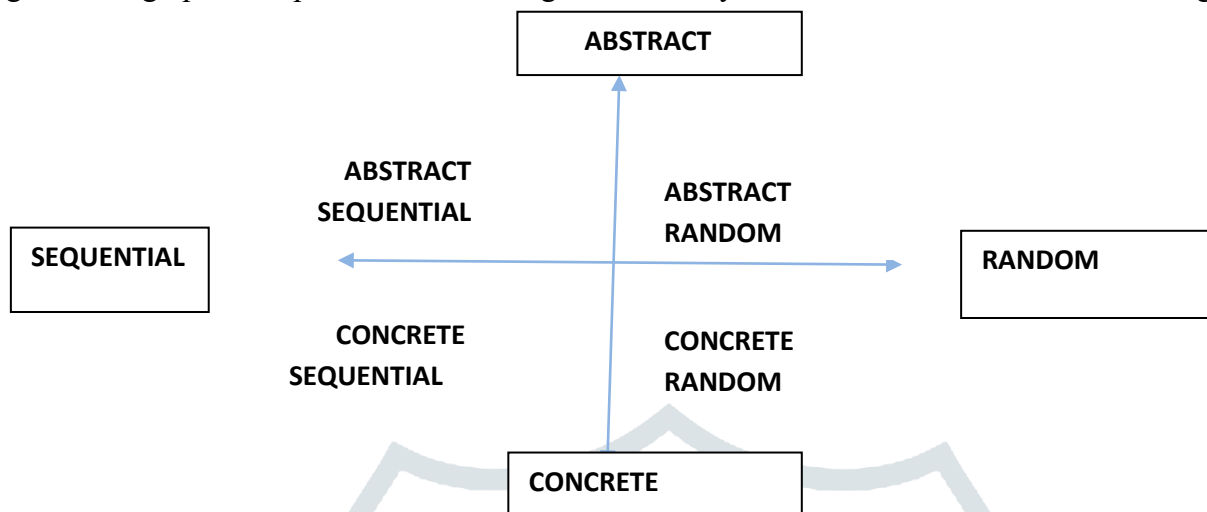


Fig. 1.2 Gregorc Learning Style

In addition to explaining both cognitive and emotional thinking, this hypothesis helps us to distinguish between the left and right brains. It is thought that the quadrant you are utilizing affects your way of thinking and how you learn. It is believed that our upper brain governs our reasoning while the lower brain governs our emotional reactions.

There are distinct traits in each of the four quadrants. Logical, analytical, quantitative, and rational thought are characteristics of the top left quadrant. Holistic, intuitive, creative, integrative, and synthesizing processes define the upper right quadrant of the brain. The bottom left is in charge of skills like organization, planning, and sequential thinking, while the lower right is in charge of emotion regulation, interpersonal skills, and attention to detail.

Honey Mumford Learning Style-This method of learning was created in 1986 by Peter Honey and Alan Mumford. Based on Kolb's preferred method of learning, it. There are four main learning methods available. According to this learning style, students should choose to study in their own way. There may be one or two learning styles, but to become more adaptable and all-around in learning, one should be willing to acquire another type.

According to them, there are 4 learning styles:

1. Activist- "I will try everything once," is the Activists' guiding principle. Activists engage in new challenges wholeheartedly and impartially. They relish the present moment and are content to let it rule their lives. They seem to be excited about everything new because they're not skeptical but rather open-minded.

2. Theorist- Theorists place a high value on reason and logic. It's good if it makes sense. In order to create intricate yet logically valid ideas, theorists modify and incorporate observations. They approach challenges logically, vertically, and step by step. They combine various data into comprehensible hypotheses. They are typically perfectionists who won't feel at ease unless everything is organized and makes sense. They like synthesizing and analyzing. They have a strong interest in fundamental presumptions, rules, theories, models, and systems thinking.

3. Pragmatist- It's good if it functions. Pragmatists are eager to test out concepts, hypotheses, and methods to discover how well they function in actual situations. They actively seek novel concepts and seize any chance to try out new applications. They are the kind of individuals that leave management classes bursting with fresh concepts that they really want to put into action. They want to move rapidly and boldly forward with ideas that interest them.

4. Reflector- They believe in exercising caution. They are intelligent individuals who want to think things out from all aspects and ramifications before acting. They gather information—both their own and that of others—and like to give it careful consideration before drawing any conclusions.

Felder and Silverman Model of Learning

This paradigm says there are four dimensions. Each learner has a distinct preference for each of these qualities, which defines them as individuals. The first dimension makes a distinction between active & reflecting information processing. The greatest way for active students to acquire is to actively engage with the learning content, put it to use, and experiment. Additionally, they frequently show a greater interest in interpersonal interactions and choose group projects that allow for discussion of the information being studied. Reflective learners, on the other hand, favor deliberating and reflecting on the subject matter. They tend to communicate best when working alone or in a small group with one close buddy.

Sensing vs intuitive learning is covered in the second dimension. Those who learn best by sensing information like to study facts and tangible learning materials. They like using tried-and-true methods to address issues and are frequently more attentive to small details. Additionally, sensing learners are seen as being more realistic and rational; they have a tendency to be more pragmatic than intuitive learners and like connecting the stuff they have learned to the outside world. Conversely, intuitive learners favor acquiring abstract information like theories and their underlying concepts. In comparison to sensory learners, they are far more likely to see connections and possibilities, & they frequently exhibit more original thinking and creativity.

The third component, known as the visual-verbal dimension, distinguishes between students who retain information better and acquire knowledge from visuals and those who benefit more from textual means, whether they are verbal or written.

According to their comprehension, the learners are categorized in the fourth dimension. Sequential learners move through learning in short chunks, hence their learning is linear. When seeking answers, they frequently take logical, sequential steps. Global learners, on the other hand, employ a holistic thinking approach and make significant learning jumps. When they first start learning, they tend to take in information practically randomly without making connections, but once they have acquired enough, they instantly understand everything. They can then resolve difficult challenges make links between different places and arrange things in creative ways yet they have trouble expressing how they achieved it.

Dunn and Dunn Learning Style

In 1975 research was started on the students who were unable to perform well. A comprehensive study was done in New York by Kenneth and Rita Dunn to discover new improved learning styles which can help the students to overcome this issue. With their 20 years of research, they discovered a new learning model which emphasizes matching the learning style of the students with the instructional methodology used for teaching experiences. According to the matching, these two spectrums will lead to higher motivation and greater absorption of the knowledge by the students. According to them, every child is unique and all of them have a different style of learning when their learning styles matches with the appropriate instructional methodology they can learn efficiently. They have considers five different stimuli that include Environmental stimuli, Emotional stimuli, Sociological stimuli, Physiological stimuli, and Psychological stimuli.

Gardner Theory Of Multiple Intelligence: in 1983 Gardner published his book “frame of mind” and mentioned seven different types of intelligence. He broke the concept that intelligence is fixed and pre-determined. It was assumed that people cannot increase or grow/her intelligence. According to him, every individual has a different level of intelligence. Every individual has some amount of all types of intelligence. The term "profile of intellect" is sometimes used to describe this hypothesis. When different types of intelligence are invoked and combined to carry out various tasks and solve the problem then it brings progress in every domain of life. His theory represents personality traits, abilities, and talents.

Table 1.2 Gardner Theory of Multiple Intelligence

s.no.	Intelligence	Characteristics
1.	Visual-spatial	<ul style="list-style-type: none"> · Good at visualization of things. · Good in direction, map, charts etc · Recognize patterns easily. · Easily solve the puzzles. · Interested in drawing, painting
2.	Linguistic-verbal	<ul style="list-style-type: none"> · Play with words · Good in writing and speaking · Good at writing stories, memorizing information. · Good in speech · Able to explain well · Enjoy reading and writing
3.	Logical –mathematical	<ul style="list-style-type: none"> · Good at reasoning, recognizing pattern · Good at logical analyzing problems · Think conceptually about numbers, relationships and patterns. · Have good problem solving skill · More scientific in nature
4.	Bodily-kinesthetic	<ul style="list-style-type: none"> · Outstanding bodily mobility and physical control; excellent hand-eye synchronization; · talent for sports and dance; and good physical control.
5.	Musical	<ul style="list-style-type: none"> · Good at music, sound and rhythms · Interested in music and instruments. · Good understanding about notes and pitch. · Easily connected to the emotion of the music.
6.	Interpersonal	<ul style="list-style-type: none"> · Good at understanding and interacting with people. · Resolve the group conflicts. · More socialized. · well in both vocal and non-vocal. · Good in observation. · Easily establish relationships with others.
7.	Intrapersonal	<ul style="list-style-type: none"> · Good in assessing their strength and weakness. · Aware of their own emotional states, motivation and feelings. · Enjoy self- reflection.
8.	Naturalistic	<ul style="list-style-type: none"> · Tend toward nature. · Exploring and nurturing the environment. · Enjoy gardening, hiking

Factors influencing learning abilities of the students- when we talk about the learning abilities of the students there are various factors that affect their development. When we talk about the development of the children we should help them to learn more or allow them to explore to their maximum. There are various factors which we should keep into consideration.

- **Genetics** – it plays a vital role when it comes to the learning ability of the child. It is said that every child is unique in himself. Every child is born with innate genetics which play an important role in their survival in this world. Many studies have proved that most of the intelligence comes from the mother and at the same time it has also been proved that intelligence comes from both the parents. But still there remains so much to discover how parent’s genes affect the child's learning abilities.

- **Environment** –child learns every bit of knowledge through the environment in which he lives. It puts great impetus on the child's acquisition of knowledge as he grows older. He gets the language and concept

from parents, siblings and his peer group. If the child is brought up in a good and healthy environment he will use his learning abilities in a positive manner but when the condition is opposite means where the environment is not good either of his home or the society in which he lives then he will use all the learning abilities in a negative direction.

- **Learning style-** every child is unique and every child has its own way of acquiring and retaining the knowledge or processing the knowledge. These strategies are called “learning style”. The ways the child acquires knowledge affect its learning ability. Every child has its own preference of learning, it may be possible that a child is good in so many styles of learning but it depends on his preference. If this is identified in his early stage then he can make great progress in his life.

- **Socio-economic status-** it plays a vital role in any one development. If a child is born in poor socio-economic status then he will not be able to access the resources. He will strive for his basic needs. He lacks proper education and even the school where these children go for education lack good and capable teachers and children who are living far away in rural area also suffer from proper education, lack of teachers and lack of facilities which is provided by the government and vice-versa happen with the children who are born in sound family who can access various resources.

- **Student-Teacher relationship:** teachers play a vital role in the life of the student. Teacher is one who brings out the inner potential of the students. If the student – teacher relation is good then children can improve a lot. A teacher is one who knows the way to discover his students. If a teacher is able to identify the learning ability of the student then he can bring desirable change in the student and bring progress in his life.

- **Classroom atmosphere:** when the atmosphere of the class is lively then students get the motivation to learn more but if the atmosphere of the class is dull then students don't take any interest in their study. They are bored and start taking their study as their burden which not only harms their progress but also hampers their learning ability.

- **Use of technology:** nowadays technology has taken a pivotal role in the education system. Teachers use technology for delivering their lesson and students use technology in their learning. It is said that “science is a good servant but bad master”. If this technology is used in the right way by the student it can help to increase their learning ability but misuse of the technology can make them totally dependent on them which can hinder their learning ability as well as their progress.

- **Practical learning or drill work:** whatever concept is taught in the class, if the student is asked to make a project on the same topics or make models or ask them to write a story or carry out the experiment etc will increase the learning abilities of the students and students will start taking interest in their studies.

1.1 Need and justification

Today is the era of technology. Technology has touched all aspects of human life. One of the best known technologies is social media which has given new meaning in human life. The use of social media is not confined to office, hospital, business or for socialization purposes but it is far more than this. Now it is used by educational institutions for imparting education. It has reshaped the whole education system. The use of social media has started from Kindergarten to university. It has empowered teachers, students and parents in new ways of sharing information and creating communities. The schools are using social media for sharing the information or organizing the events. Teachers are using social media to make teaching more interesting and attractive. It also helps the teachers to make the concept more clear for students. Students are using social media for gathering information about their project, new vocation and its scope, for entertainment and socialization. In today's time parents are busy with their work they don't have time to attend the parents meeting, through this tool they are connected to the school and they can get the information about their child's progress. There are uncountable benefits of using social media for all.

Sometimes such situations occur which force us to change the old scenario and embrace new alternatives over old ones. Like this pandemic situation where it becomes difficult to impart education through traditional ways. For such a situation social media has emerged as the best alternative over the traditional ways. This pandemic situation has realized the importance of social media. When there were no ways of imparting education then this media has proved boon in every aspect either for education or commercial or for socialization.

It is the need of the time and demand of the educational field to make a parallel pathway of the traditional education system along with the new media system. In this context social media is facilitating education a lot.

1.3 Review of related literature

In order to enhance students' ability to learn mathematics, this study looks at social media. From approximately 4,000 Senior Secondary 2 (SS2) people studying in 14 secondary schools in the Ojo local government area of Lagos State, the simple random sampling technique was used to select 204 SS2 students in 5 public secondary schools. The data was gathered using two different methods: the Students' Social Media Usage Questionnaire (SSMUQ) and the Students' Mathematics Examination Scores (SMES). In order to respond to the research questions, descriptive statistics like means and line graphs were used, and ANOVA was used to test the null hypotheses. According to the research, 88 percent of students use social media for chatting, watching videos, or as a hobby. Hardly two students use social media for research, and three use it for test preparation, out of all those who use WhatsApp, Facebook, or both. Nevertheless, one of the outcomes demonstrates that social media significantly affects pupils' capacity for math learning. Additionally, research demonstrates that students' ability to use social media for math is unrelated to the purpose for which they use it. Furthermore, it was shown that the level of mathematical proficiency among student social media users varies considerably. This is clear from the mean ability levels that were calculated for Facebook users exclusively, WhatsApp users only, Facebook plus WhatsApp users, and neither, which were 1.85, 2.88, 2.02, and 1.8, respectively. This suggests that WhatsApp users alone have the greatest ability level and that neither Facebook nor WhatsApp users have poor mathematical ability levels. The researchers advised mathematics teachers to utilize WhatsApp to enhance their pupils' learning capabilities in order to achieve this goal. Finally, to maintain an equilibrium between social media and academic activities for better math performance, parents and instructors should keep an eye on their children while they utilize social networking sites.

The research looked at how social media affects secondary school students in Lagos State's Alimosho Local Government Area in terms of their ability to learn. The study was directed by five research questions and five matching hypotheses. The study's research design was a descriptive survey. A total of 250 individuals (125 males and 125 girls, respectively) were chosen from 10 secondary schools in the research population using the stratified and simple random selection procedure. The data for the study were gathered using a 25-item Likert-type questionnaire titled "Social Media and Students' Learning Ability Questionnaire and Student Achievement Test in the English Language." The Chi-Square statistics were used to test hypotheses 1, 2, and 3, while the t-test and ANOVA were used to test hypotheses 4 and 5, respectively. The research's conclusions demonstrate that social media use has a substantial impact on students' attitudes toward learning in the classroom as well as their writing abilities. The study also found that social media usage had a substantial impact on students' academic performance in secondary schools, that there was no gender difference in students' use of social media in the study region, and that social media usage had no discernible effect on teenagers' ages. The suggestions were based on the research's findings, and they included, among other things, the necessity of integrating social media with academic lesson content in secondary schools, requiring students to adhere to the formal style of writing in class, and forbidding them from wasting their time for reading and independent study on social media content-generating websites. There should be social media usage counseling programs in place for both male and female students. In order to inform students of various age groups about the use of social media for academic learning, it is also necessary to develop appropriate behavioral change instructional materials.

2. OBJECTIVES:

1. To study the use of social media by secondary school students on the basis of gender and locale.
2. To study the learning abilities of secondary school students on the basis of gender and locale.
3. To study the relationship between social media and learning ability.

3. HYPOTHESIS

1H0: There is no significant difference in the use of social media by secondary school students on the basis of gender and locale.

2H0: There is no significant difference in the learning abilities of secondary school students on the basis of gender and locale.

3H1: There is a significant relationship between social media and learning ability.

4. Research Methodology

Area of the study- The study was conducted in Prayagraj.

Research Design- Descriptive survey research was used for this study.

Population- Population consists of students of secondary schools.

Sample- 500 students participated in the study. Out of which 274 students were boys and 226 students were girls.

Sampling Type- stratified random sampling was used in this research.

Tools selection-

1.Learning ability – the standardized tool of verbal intelligence test created by R.K. Ojha and K. Ray Chowdhury is used in this study.

2. Social media – The researcher constructed a standardized tool for the usage of social media.

Statistical method- t-test, S.D., Karl Pearson coefficient correlation was used in this study.

5 Analysis and interpretation

5.1 To study the use of social media between the boys and girls of secondary school.

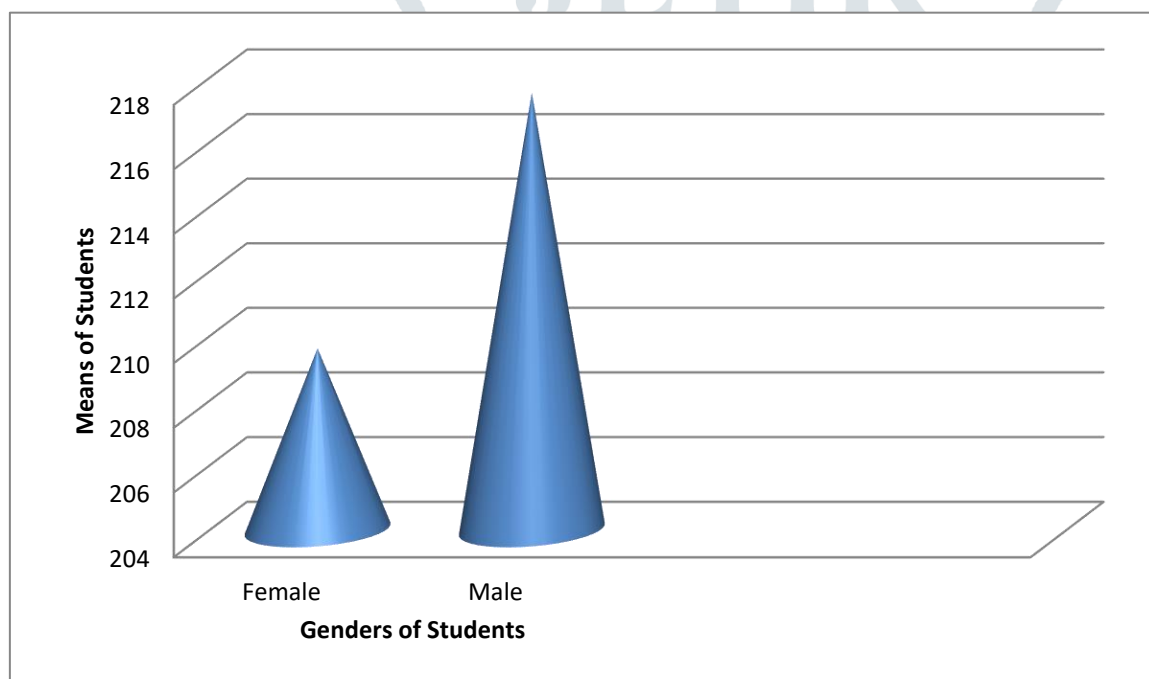
H0: There is no significant difference in the use of social media between the boys and girls of secondary school level.

Table- 5.1 Mean, S.D. and t-ratio of the use of social media between the boys and girls of secondary school

Gender	N	Mean	SD	df	t-ratio
Female	224	209.60	35.56	493	-2.35
Male	276	217.53	39.84		

*significant at 0.05 level of significance.

From table- 5.1 it is clear that the calculated value of t-ratio -2.3477 is greater than the table value of t-ratio at a 0.05 level of significance. Therefore the null hypothesis is rejected at a 0.05 level of significance that “there is no significant use of social media between the boys and girls of secondary school”. Hence it is stated that there is a significant difference in usage of social media between boys and girls in secondary school. Some previous researches support this finding as Peter Osharive (2015), that there is a significant difference in the usage of social media by secondary school students on the basis of gender.

Graph 5.1 Mean for the use of social media between boys and girls of secondary school

It is revealed from graph 5.1 that the use of social media in girls has a mean of 209.607 which is less than the boys having a mean of 217.532. The existing difference in the use of social media between the boys and girls of secondary school is significant at a 0.05 level of significance.

So it can be stated that the use of social media is more among boys than girls at the secondary school level. There may be probably many reasons behind it.

5.2 To study the use of social media between the rural and urban students of secondary school level.

H0 : There is no significant difference in the use of social media between the rural and urban students of secondary school level.

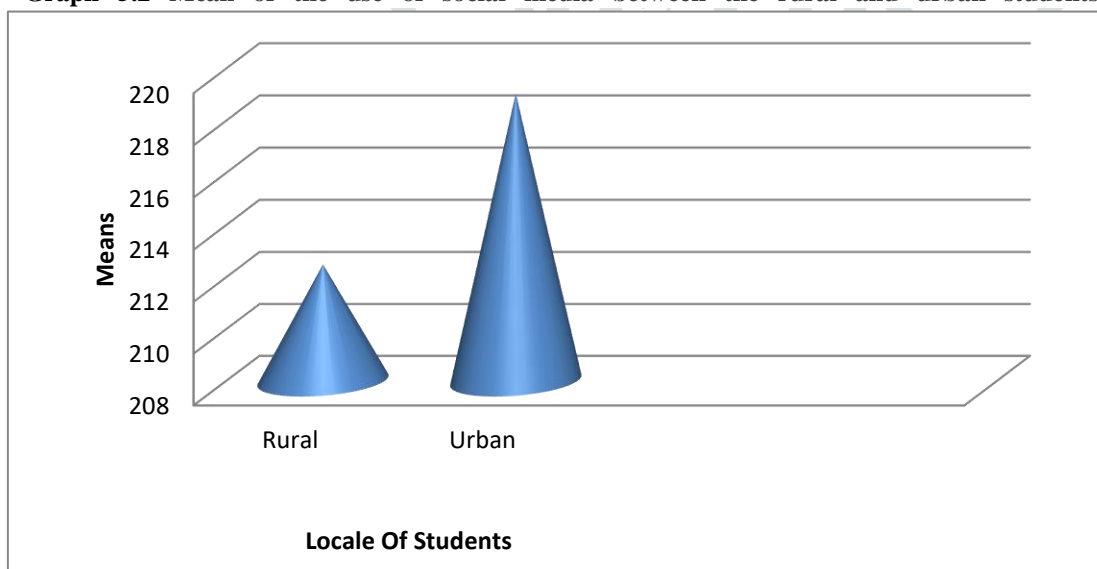
Table 5.2 Mean, S.D., and t-ratio of the use of social media between the rural and urban students of secondary school level

Residence	N	Mean	SD	df	t-ratio
Rural	259	212.49	38.800	490	-2.07
Urban	241	219.05	31.910		

***significant at 0.05 level of significance.**

From table- 5.2 it is clear that the calculated value of t-ratio -2.07 is greater than the table value of t-ratio at a 0.05 level of significance. Therefore the null hypothesis is rejected at a 0.05 level of significance that “there is no significant use of social media between the rural and urban students of secondary school level.

Hence it is stated that there is a significant difference in the use of social media between rural and urban areas of secondary school students. The previous studies done by CO Akomolafe (2019), it has been proved that Students located in urban areas have greater access to the internet; hence, they were more involved with social media and prove the finding that there is a significant difference between the use of social media between rural and urban area of secondary school students.

Graph 5.2 Mean of the use of social media between the rural and urban students of secondary school level.

It is revealed from graph 5.2 that the use of social media by rural students has a mean of 212.494 which is less than the urban students having a mean of 219.049. The existing difference in the use of social media between the rural and urban students of secondary school is significant at a 0.05 level of significance.

So it can be stated that the use of social media is more done by urban students as compared to rural students of secondary school level. There may be probably many reasons behind it.

5.3 To study the learning abilities between boys and girls at the secondary school level.

H0: There is no significant difference in the learning abilities between boys and girls of secondary school level

Table 5.3 Mean, S.D., and t-ratio of the learning abilities between the boys and girls of secondary school level

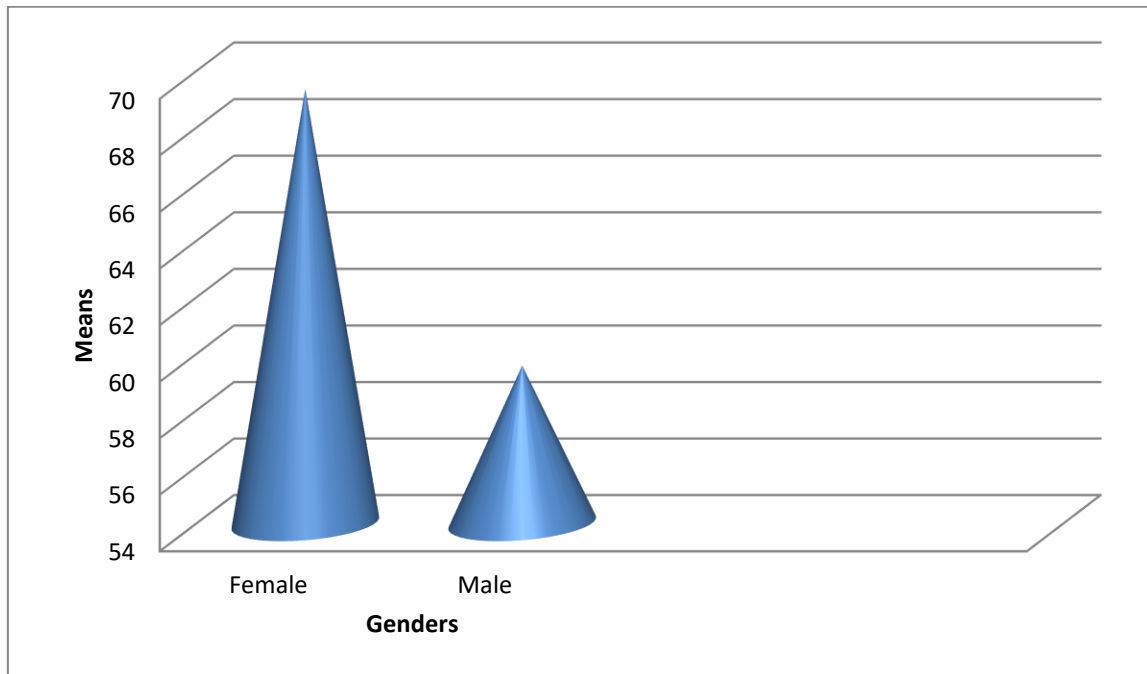
Gender	N	Mean	SD	df	t-ratio
Female	224	69.37	16.04	494	5.79
Male	276	59.58	21.72		

***significant at 0.05 level of significance.**

From table- 5.3 it is clear that the calculated value of t-ratio 5.79 is greater than the table value of t-ratio at a 0.05 level of significance. Therefore the null hypothesis is rejected at a 0.05 level of significance that “there is no significant difference in the learning abilities between boys and girls of secondary school level.

Hence it is stated that there is a significant difference in the learning abilities of secondary school students on the basis of gender. It has been proved by previous research (Victoria O. Olisama, Kennedy O. Akudo,2018) that there is a significant difference in the learning ability of boys and girls. Girls have higher learning abilities than boys.

Graph 5.3 Mean of the learning abilities between boys and girls of secondary school level.



It is revealed from graph 5.3 that the learning ability in girls has a mean of 69.366 which is greater than the boys having a mean of 59.581. The existing difference in the learning ability between the boys and girls in secondary school is significant at a 0.05 level of significance.

So it can be stated that the learning ability is more *in girls than boys* at the secondary school level.

5.4 To study the learning abilities between the rural and urban students of secondary school level.

H0 : There is no significant difference in the learning abilities between the rural and urban students of secondary school level.

Table 5.4 Mean, *S.D.*, and t-ratio of the learning ability between the rural and urban students of secondary school level.

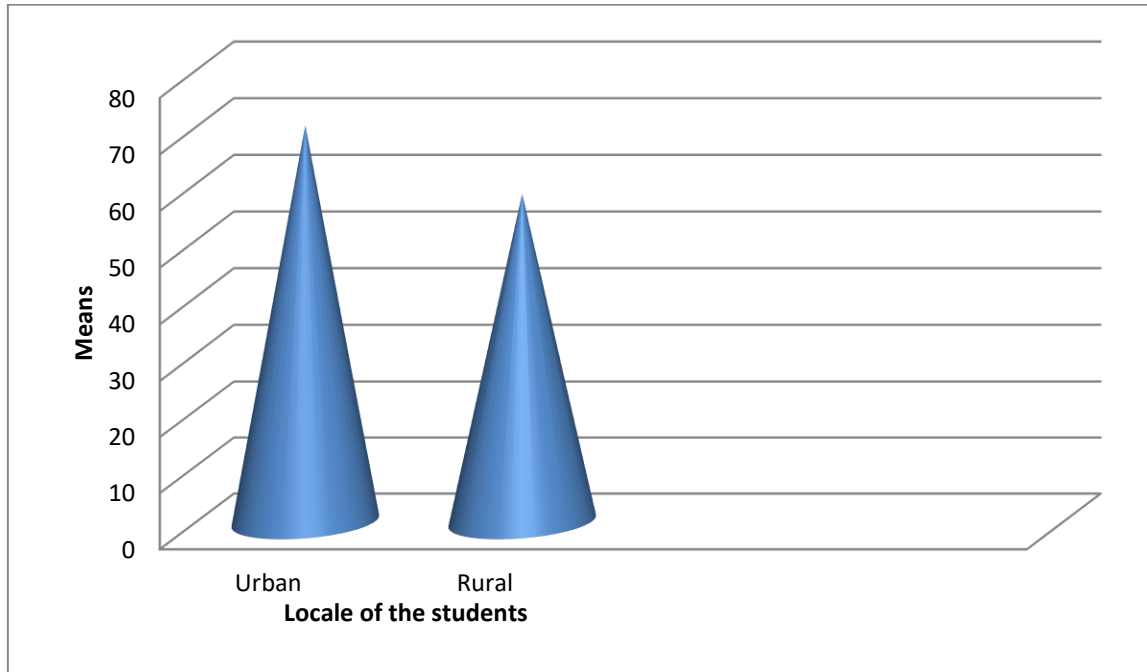
Locale	N	Mean	SD	df	t-ratio
Rural	259	58.13	20.29	496	7.13
Urban	241	70.23	17.61		

***significant at 0.05 level of significance.**

From the table- 5.4 it is clear that the calculated value of t-ratio 7.13 is greater than the table value of t-ratio at 0.05 level of significance. Therefore the null hypothesis is rejected at 0.05 level of significance that “there is no significant difference in the learning abilities

Hence it is stated that there is significant difference on the learning abilities of secondary school students on the basis of locale. The previous studies (Juan F. Castro and Caine Rolleston,2015) has also proved that there is a significant difference in the learning ability of rural and urban students. It has been found that urban students have higher learning ability than rural students.

Graph 5.4 Mean of the learning ability between the rural and urban students of secondary school level.



It can be interpreted from graph 5.4 that the learning ability of rural students has a mean of 58.133 which is less than the urban students having a mean of 70.232. The existing difference in the learning ability of the rural and urban students of secondary school is significant at a 0.05 level of significance.

So it can be stated that the learning ability of *urban students is more as compared to rural students* of secondary school level.

5.5 To study the relationship of social media and learning abilities

H1: There is significant relationship of social media with learning abilities.

Table 5.5

Karl Pearson Correlation between social media and learning ability

variables	N	Pearson correlation(r)
Social media	500	0.42
Learning ability	500	

*Significant at 0.01 level of significance

It can be interpreted from the above table that there is a positive correlation between social media and learning ability. The correlation value is 0.416 between social media and learning ability. It implies that those students who use social media have better learning ability than the students who are not using social media. Therefore the alternative hypothesis is accepted stating that ‘there is a significant relationship between social media and

learning ability at secondary school level". The previous studies done by **Kennedy Akudo, 2018** has also proved that the students who are using social media have more learning ability than the students who are not using social media.

Conclusion:

Through this study it can be concluded that social media help in enhancing the learning ability. It helps in understanding the concept and makes the concept clear to the students. It enables the students to apply the learned knowledge in different situations which boost their confidence level. Though there many benefits of using social media which somewhere show positive impact on the learning ability but there is always a darker side of social media. Excessive usage of social media leads to addiction which can lead to severe health issues and make the students dependent on social media which can harm their own creativity.

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