



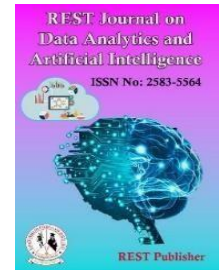
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Evaluation of Mobile Devices and Learning Motivations in the Classroom using SPSS

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Abstract: Learning motivations and mobile devices are closely interconnected in today's digital age. Smartphones and tablets mobile devices like, have significantly impacted the way people access information and engage in learning activities. Here are some key aspects to consider regarding learning motivations and their relationship with mobile devices: **Accessibility:** Mobile devices provide easy access to a vast amount of information and learning resources. Learners can access educational content from anywhere and at any time, which removes barriers to learning and motivates them to explore new subjects or topics. **Convenience:** The portability of mobile devices allows learners to fit learning activities into their busy schedules. Whether it's during a commute, waiting in line, or during breaks, people can engage in short learning sessions, making learning more manageable and appealing. **Personalization:** Mobile devices enable personalized learning experiences through apps, adaptive learning platforms, and customizable content. Tailoring educational content to individual preferences and skill levels can enhance motivation and engagement. **Gamification:** Many leaderboards, and challenges, making learning more interactive and enjoyable. These gamified features can motivate learners to complete tasks and achieve learning goals. The significance of researching learning motivations and mobile devices lies in its educators and developers can create more engaging and interactive learning experiences. This can lead to increased student participation, retention of knowledge, and overall learning outcomes. **Inclusive Learning Opportunities:** Mobile devices can bridge the gap between learners in different geographic locations or with limited access to traditional educational resources. Research on learning motivations can inform the development of inclusive learning tools and strategies, ensuring that education is accessible to a broader audience. **Personalized Learning:** Understanding individual learning motivations through mobile devices can facilitate personalized learning experiences. Adaptive learning platforms can leverage this research to tailor content and activities based on learners' preferences, skills, and interests. **Optimal Use of Technology:** Mobile devices are omnipresent in modern society, and their integration into education is inevitable. Research on learning motivations can guide educators in making informed the classroom and beyond. SPSS is descriptive and bivariate data for statistics analytical, numerical effect projections and groups for identification provides predictions. software data conversion, map and direct marketing aspects provides software the interface is its key similar to a spreadsheet in view also shows open data. computer supported cooperative learning, computer supported cooperative play, E-learning, mobile & wireless games, mobile learning The Cronbach's Alpha Reliability result. The overall Cronbach's Alpha value for the model is .658 which indicates 66% reliability. From the literature review, the above 50% Cronbach's Alpha value model can be considered for analysis.

Keywords: computer supported cooperative learning, computer supported cooperative play, E-learning, mobile & wireless games, mobile learning,n

1. INTRODUCTION

Learning motivations and mobile devices are closely interconnected in today's digital age. Smartphones and tablets mobile devices have significantly impacted the way people access information and engage in learning activities. Here are some key aspects to consider regarding learning motivations and their relationship with mobile devices: **Accessibility:** Mobile devices provide easy access to a vast amount of information and learning resources. Learners can access educational content from anywhere and at any time, which removes barriers to learning and motivates them to explore new subjects or topics. **Convenience:** The portability of mobile devices allows learners to fit learning activities into their busy schedules [1]. Whether it's during a commute, waiting in line, or during breaks, people can engage in short learning sessions, making learning more manageable and appealing.

Personalization: Mobile devices enable personalized learning experiences through apps, adaptive learning platforms, and customizable content. Tailoring educational content to individual preferences and skill levels can enhance motivation and engagement. Gamification: Many leaderboards, and challenges, making learning more interactive and enjoyable. These gamified features can motivate learners to complete tasks and achieve learning goals. Microlearning: Mobile devices are well-suited for microlearning, which involves delivering bite-sized, focused pieces of information [2]. Short lessons or quizzes encourage learners to complete small tasks regularly, leading to a sense of accomplishment and sustained motivation. Social Learning: Mobile devices facilitate social interactions and collaborative learning. Social media, discussion forums, and educational communities enable learners to share knowledge, seek help, and learn from peers, fostering a sense of community and motivation to participate. Multimodal Learning: Mobile devices support this multimodal approach to learning caters to different learning preferences, making the learning experience more engaging and motivating [3]. Goal Setting and Tracking: Mobile apps and tools often allow learners to set goals and track their progress. Seeing tangible progress and milestones achieved can enhance motivation and encourage learners to continue their educational journey. Immediate Feedback: Mobile learning platforms can provide immediate feedback on quizzes, assessments, and exercises. Timely feedback reinforces learning and encourages learners to keep trying until they master the content. Continuous Learning: The ubiquity of mobile devices supports continuous learning, where learners can access ongoing educational content and stay updated on new developments in their areas of interest [4]. In this context, mobile technologies are being used to deliver educational content and support language learning. The text suggests that the first part of the research involves different types of participants who are asked questions about their usage of mobile devices for various tasks. The second part of the research includes a sample of participants and measures various constructs, likely related to their interaction with mobile devices and language learning. The text indicates that there are items available, likely referring to survey questions, which are presented in an appendix. The survey also collects demographic information from participants. The text acknowledges that participants may come from different language backgrounds and have varying proficiency levels. To address this, the survey has been translated into the participants' first language to ensure comprehension and accurate responses [5]. Learning motivations refer to the internal or external factors that drive individuals to engage in the process of learning. These motivations influence why people seek knowledge, acquire new skills, and pursue educational opportunities. Understanding learning motivations is essential for educators, policymakers, and learners themselves, as it can significantly impact the effectiveness and success of the learning experience. Intrinsic Motivation: This type of motivation comes from an individual's internal desire to learn and explore new things. Intrinsically motivated learners are driven by curiosity, enjoyment of the learning process, and the satisfaction of mastering a subject [6]. Extrinsic Motivation: Extrinsic motivation arises from external rewards or incentives. It includes factors such as grades, praise, recognition, certificates, or material rewards. While extrinsic motivation can be effective in encouraging initial engagement, long-term learning is often sustained by intrinsic motivation. Achievement Motivation: Some individuals are motivated by the desire to achieve specific goals or demonstrate competence in a particular field. They set challenging learning objectives and are motivated by the sense of accomplishment when they achieve them. Social Motivation: Social motivation is driven by the desire to interact with others and be part of a learning community. Collaboration, discussion, and peer learning can be powerful motivators for social learners. Cognitive Motivation: Cognitive motivation is rooted in a person's desire to understand and make sense of the world. These learners are motivated by the intellectual challenge and the opportunity to develop problem-solving skills. Career and Future Aspirations: Many learners are motivated by their career goals and aspirations [7]. They see education and learning as a means to enhance their career prospects and achieve success in their chosen field. Interest and Passion: Passionate learners are motivated by their strong interests and passions for specific subjects or topics. Their intrinsic curiosity drives them to explore and delve deeper into areas that fascinate them. Fear of Failure: Some learners are motivated by the fear of failure or negative consequences. They may strive to perform well to avoid disappointment, criticism, or potential setbacks. Personal Development: Learning can be motivated by personal growth and self-improvement. Some individuals view education as a pathway to self-discovery and personal development. External Circumstances: External factors such as educational requirements, job demands, or societal expectations can also motivate individuals to engage in learning [8]. Mobile devices have become an integral part of classrooms, just like in various other contexts. Over the past ten years, these devices have merged with different forms of Information and Communication Technologies (ICTs). This trend is being embraced by an increasing number of educators, as noted in studies by Campbell (2006) and Wei, Wang, and Klausner (2012). In the educational sphere, ICTs serve as tools for sharing and retrieving information. This integration of mobile technology has proven effective in the classroom, fostering an environment that promotes engagement (Dennis, Rennecker, & Hansen, 2010). However, not all behaviors associated with mobile devices are conducive to effective learning. Despite the benefits of these devices, their

widespread use has raised concerns about their impact on learning and educational outcomes [9]. This exploratory single case study's objective was to investigate the real-life encounters of a Grade 6 teacher and her students that utilized tablets in the classroom. This study especially focuses on how grade 6 instructors as well as pupils perceive the motivating costs associated with using mobile mobile phones for learning. This essay aims to explain how theories of pupil drive to learn apply concerns the use of mobile devices during classroom education. As a result, the research inquiry that follows serves as the study's guiding principle: According to beginning educators and learners, what are the motivational costs of utilizing mobile devices for learning? [10]. gadgets on the go (Wang, Wu, & Wang, 2009). Handy phones, personal digital assistants, tablets, mobile phones, and portable audiovisual players are just a few examples of devices that can be used for m-learning is a brand-new, distinct area of e-learning in which only mobile technology devices are used to manage instructional information. Even while m-learning is becoming more and more popular as the next cutting-edge technology to enable learning via the internet, a recent study shows that there are still difficulties. Promote topic of importance to this study since it has been largely ignored in earlier studies and because encouraging its adoption is becoming difficult. Providers are [11]. Particularly among university students, mobile gadgets like PDAs and smartphones are becoming more and more commonplace in daily life. A long-term effort has been started by the City Graduate School of Hong Kong to create and incorporate mobile educational events into the setting of undergraduate courses. are discussed in this study. The findings are consistent with the hypothesis that both intrinsic and extrinsic incentive to use mobile applications are related to higher performance, however with the helpful moderating effect of learning by student interests [12]. Mobile devices, also known as handheld devices or portable devices, are electronic gadgets that are designed to be easily carried around and used while on the move. These devices have become an integral part of modern life and have revolutionized the way we communicate, access information, and carry out various tasks. Here are some key characteristics and types of mobile devices: Portability: Mobile devices are small and lightweight, making them easy to carry in pockets, bags, or purses. Connectivity: They are equipped with wireless technologies such as Wi-Fi, Bluetooth, and cellular data to connect to the internet and other devices. Touchscreens: Many mobile devices feature touch-sensitive screens, allowing users to interact directly with the device using their fingers or a stylus [13]. Battery-Powered: Since they are meant to be used on the go, mobile devices are powered by rechargeable batteries, ensuring they can be used without being constantly plugged in. those of a computer, offering features like internet browsing, email, multimedia playback, apps, and much more. Tablets: Tablets are larger than smartphones and typically have bigger screens. They offer similar functionalities to smartphones but with more screen real estate, making them suitable for reading, gaming, and productivity tasks. Laptops and 2-in-1s: While not as compact as smartphones and tablets, laptops and 2-in-1s (convertible laptops with touchscreen capabilities) are still considered mobile devices as they are designed to be easily carried around and used on the go. Wearable Devices [14]. These devices are worn on the body and can include smartwatches, fitness trackers, augmented reality glasses, and other gadgets that provide information and services in a hands-free manner. various smartphone and tablet manufacturers. iOS: Developed by Apple, iOS is exclusive to iPhones and iPads. Windows: Microsoft's mobile operating system, which has been largely replaced by Windows 10 and other platforms. Others: There are other less common mobile operating systems like BlackBerry OS, Tizen, and KaiOS. Applications (Apps): apps, usually referred to as apps, are widely used by mobile devices [15]. These are computer programmers created to carry out particular functions including social media, gaming, effectiveness, navigation, and more. Apps can be downloaded by users via official sites such as the Google Play Marketplace for Android and the App Store at Apple for iOS. Mobile devices can be used by adults as tools for informal learning. Informal learning has been defined by numerous academics. According to Coombs (1985), officially acquired knowledge is "spontaneous, unstructured education that occurs constantly in the home and neighbourhood, back the school along the playing fields, at work, the market, a bookstore and museum, and via innumerable mass media." [16]. A classification with unstructured instruction was also utilised by Scharwenka (2000), depending on the learner's purpose to learn as well as comprehension of the educational process. The three unstructured learning approaches are self-directed. Learning can be intentional and aware that is incidental but knowing of an accident, or implicit and subliminal (Schugurensky, 2000). According to these definitions, informal learning is self-directed, voluntary learning that takes place in a variety of contexts. Mobile devices can contribute to social educational experiences because they are among the most widely used technologies in daily life [17]. Mobile devices and RFID technology are continuing to advance, facilitating learning activities and enabling learners to acquire knowledge. This assistance in gaining knowledge allows learners to evaluate their learning approach. This learning approach can be acquired anytime and anywhere using portable mobile devices. These devices are especially useful in on-demand learning, fostering engagement [18]. A pioneering u-learning environment was established by Hwang et al. at the Science Park in Southern Taiwan. They demonstrated how to incorporate 2.2. Universal education with Tagging/Wireless technologies by using systems that used RFID for

imparting cosmological topics. The term "Anytime, Anywhere Learning," which is frequently used to describe ubiquitous learning, has become well-known. Wireless network, sensor, and mobile device advancements during the past ten years have greatly influenced the creation of cutting-edge teaching methodologies [19]. Mobile devices have gained popularity and align with the era of internet connectivity and location-based services, breaking down traditional constraints. The concept of ubiquitous learning has become essential, enabling education to transcend physical boundaries. Teaching methods for digital learning are designed alongside technological tools, promoting adaptable usage that incorporates up-to-date information. Integrating technology into education presents significant challenges [20]. In this particular study, the focus is on digital learning. The objective is to comprehend student opinions and experiences. To achieve this, students are assessed through a questionnaire, allowing for a comprehensive survey. The research aims to effectively reach and investigate, and to test hypotheses. Quasi-experimental research is employed, involving four classes and a total of 116 students as participants. Traditional teaching is less effective than digital learning in terms of motivating learning, demonstrating positive outcomes. Digital learning outperforms traditional teaching, showcasing more favorable results in learning outcomes. Learning driven by digital means has a significant positive impact on learning outcomes. Learning outcomes are notably enhanced through motivational digital learning, resulting in positive gains. [21]. Engaging in mobile devices during leisure time has led to the development of Android as a platform for creating games and applications. These are specifically designed for mobile devices, following the Android system and computer-aided instruction (CAI) principles. There are certain limitations associated with mobile devices, which can effectively facilitate the learning process for undergraduate students. To ensure this effectiveness, it has been suggested that mobile devices for educational purposes need to consider various factors from past studies. One of the key determinants is the design of course content [22]. When dealing with abstract concepts in education, students often find it challenging to grasp the content solely through textual explanations. This is why students resort to using pen and paper to create diagrams or illustrations alongside the written content. The reason behind this preference is that pure text descriptions are not easily comprehensible. Visual aids, such as graphics, prove to be valuable tools for enhancing learning. Kalthoff, in his recommendations, highlights the effectiveness of using graphics as a learning aid. He also delves into the concept of employing graphics in educational contexts [23]. The prior knowledge of the learners and their ability to manage their learning process independently. Graphics can significantly enhance the learning outcome, especially when students possess prior knowledge and self-control. Robinson's research also demonstrated that when compared to textbooks containing only text, educational materials that incorporate well-structured graphics, such as organizers (GOs), can have a positive impact on learning. [24]. The utilization of mobile devices in the context of learning was highlighted in Rochelle's study in 2003. Sharples et al. (2002) emphasized that traditional formal learning systems can extend their reach through mobile technologies. Mobile devices offer a distinct approach to learning, presenting opportunities combining the two types of educational environments. The MobilEarn programme, which intends to investigate the possible benefits of smartphones and tablets in supporting both classroom and online instruction, is a perfect example of this [25]. The study investigates how mobile devices can be effectively integrated into various contexts, particularly focusing on three specific usage scenarios: health, museum, and management education. The application of mobile devices in these settings is explored, analyzing how they can enhance learning possibilities and examining the underlying structural aspects. One of the areas discussed is Management Education, which emerged due to specific circumstances [26]. For management students, as well as for other students across the university, utilizing available resources via mobile devices for rapid access to learning content poses challenges. Creating a conducive learning environment with mobile technology as a focal point is not a straightforward task. Collaborative activities with fellow students, including team-building exercises, are incorporated into the early stages of learning to provide support. [27]. Utilizing mobile devices for educational purposes and inspiring learner motivation, mobile technology has the capacity to enhance learning experiences. The study conducted by Huizenga, Admiraal, Akkerman, and Dam (2009) in the context of secondary education demonstrated that mobile-based learning, centered around interactive educational games, offers situational and active learning opportunities. This approach fosters student engagement by infusing learning with an element of enjoyment, thereby boosting motivation and overall learning outcomes. The potential for learning efficacy was highlighted [28]. The learning process of mobile devices has the potential to yield multiple benefits, including heightened student engagement and improved learning and teaching methods. Furthermore, this incorporation could lead to increased retention rates, as indicated by Joosten's research in 2010. Active learning approaches can be further facilitated through the adoption of mobile technology, allowing deep learning experiences to create additionally, application of the novel technologies is actively encouraged, aligning with the evolving landscape of education. This shift increasingly centers around learning that hinges on timely access to information, empowering students to address problems, solve challenges, and nurture their curiosity [29]. Mobile devices such

as smartphones, which come equipped with wireless capabilities and features like cameras, voice presentation, The selection was made with a focus on basic mobile phones to carry out activity analysis. In accordance with the operations of executing learning tasks on these mobile devices, students followed provided instructions. These instructions were tailored to suit particular learning objectives. Within the designated learning area, target boards or goods were positioned on the walls, each featuring numerous QR codes [30].

2. MATERIAL AND METHOD

Method: SPSS (Statistical Package for the Social Sciences) is a popular software used for statistical analysis and data management. It is commonly used in various fields, including social sciences, psychology, business, and healthcare. The SPSS method typically involves the following steps: Data Entry: The first step is to enter the data into SPSS. This can be done manually, importing data from external sources (e.g., Excel), or using data collection tools integrated with SPSS. Data Cleaning and Preparation: Once the data is entered, it needs to be cleaned and prepared for analysis. This involves checking for missing values, outliers, and data errors. We may also need to recode variables, transform data, or create new variables as required. such as mean, median, standard deviation, minimum, and maximum. SPSS can generate descriptive statistics for individual variables or groups of variables. Data Analysis: SPSS offers a wide range of statistical analysis options, t-tests, ANOVA, regression, Correlation, factor analysis and arm-square Tests etc. Chosen Specific analysis Methodological research question and will be analyzed Depends on the data type. Interpretation of Results: After conducting the statistical analysis, you need to interpret the results. SPSS outputs tables and graphs that present the results of the analysis. It's important to carefully interpret the findings in the context of the research question and the data. Reporting and Visualization: SPSS allows you to generate tables and charts to visualize the results of the analysis. These visual representations can be included in research reports, presentations, or academic papers. Data Export: Once the analysis is complete, you may need to export the results to other formats (e.g., Excel, Word, PDF) for further reporting or sharing with others.

3. RESULT AND DISCUSSION

TABLE 1. Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation	Variance
Computer supported cooperative learning	90	4	1	5	282	3.13	.115	1.093	1.196
Computer supported cooperative play	90	4	1	5	270	3.00	.131	1.245	1.551
E-learning	90	4	1	5	291	3.23	.133	1.264	1.597
Mobile & wireless games	90	4	1	5	294	3.27	.119	1.130	1.276
Mobile learning	90	4	1	5	297	3.30	.158	1.495	2.235
Valid N (listwise)	90								

Table 1 shows the descriptive statistics values for the highest mean value is for "Mobile Learning" (Mean: 3.30). The lowest mean value is for "Computer Supported Cooperative Play" (Mean: 3.00). The highest standard deviation is for "Mobile Learning" (Std. Deviation: 0.158). The lowest standard deviation is for "Computer Supported Cooperative Learning" (Std. Deviation: 0.115). The highest variance is for "Mobile Learning" (Variance: 1.495). The lowest variance is for "Computer Supported Cooperative Learning" (Variance: 1.093).

TABLE 2. Frequencies Statistics

		Computer supported cooperative learning	Computer supported cooperative play	E-learning	Mobile & wireless games	Mobile learning
N	Valid	90	90	90	90	90
	Missing	0	0	0	0	0
Mean		3.13	3.00	3.23	3.27	3.30
Std. Error of Mean		.115	.131	.133	.119	.158
Median		3.00	3.00	3.00	3.00	3.00
Mode		3	3	3	3	5
Std. Deviation		1.093	1.245	1.264	1.130	1.495
Variance		1.196	1.551	1.597	1.276	2.235
Skewness		-.429	.321	-.043	-.260	-.098
Std. Error of Skewness		.254	.254	.254	.254	.254
Kurtosis		.047	-.794	-.900	-.198	-1.484
Std. Error of Kurtosis		.503	.503	.503	.503	.503
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		282	270	291	294	297
Percentiles	25	3.00	2.00	2.00	3.00	2.00
	50	3.00	3.00	3.00	3.00	3.00
	75	4.00	4.00	4.00	4.00	5.00

Table 2 Show the Frequency Statistics in Computer Supported Cooperative Learning is Mean: 3.13, Median: 3.00, Mode: 3, Std. Deviation: 1.093, Variance: 1.196, Skewness: -0.429 (negative skewness indicates a slight left-skewed distribution), Kurtosis: 0.047 (close to zero indicates a relatively normal distribution), Range: 4 (difference between maximum and minimum values), Minimum: 1, Maximum: 5, Sum: 282, Percentiles: 25th percentile - 3.00, 50th percentile - 3.00, 75th percentile - 4.00, Valid N (listwise): 90. Computer Supported Cooperative Play is Mean: 3.00, Median: 3.00, Mode: 3, Std. Deviation: 1.245, Variance: 1.551, Skewness: 0.321 (positive skewness indicates a slight right-skewed distribution), Kurtosis: -0.794 (negative kurtosis suggests a flatter distribution than a normal curve), Range: 4, Minimum: 1, Maximum: 5, Sum: 270, Percentiles: 25th percentile - 2.00, 50th percentile - 3.00, 75th percentile - 4.00, Valid N (listwise): 90. E-learning is Mean: 3.23, Median: 3.00, Mode: 3, Std. Deviation: 1.264, Variance: 1.597, Skewness: -0.043 (close to zero indicates almost no skewness), Kurtosis: -0.900 (negative kurtosis suggests a flatter distribution than a normal curve), Range: 4, Minimum: 1, Maximum: 5, Sum: 291, Percentiles: 25th percentile - 2.00, 50th percentile - 3.00, 75th percentile - 4.00, Valid N (listwise): 90. Mobile & Wireless Games is Mean: 3.27, Median: 3.00, Mode: 3, Std. Deviation: 1.130, Variance: 1.276, Skewness: -0.260 (negative skewness indicates a slight left-skewed distribution), Kurtosis: -0.198 (negative kurtosis suggests a flatter distribution than a normal curve), Range: 4, Minimum: 1, Maximum: 5, Sum: 294, Percentiles: 25th percentile - 3.00, 50th percentile - 3.00, 75th percentile - 4.00, Valid N (listwise): 90. And Mobile Learning is Mean: 3.30, Median: 3.00, Mode: 5 (indicating that the most frequently occurring value is 5), Std. Deviation: 1.495, Variance: 2.235, Skewness: -0.098 (negative skewness indicates a slightly left-skewed distribution), Kurtosis: -1.484 (negative kurtosis suggests a flatter distribution than a normal curve), Range: 4, Minimum: 1, Maximum: 5, Sum: 297, Percentiles: 25th percentile - 2.00, 50th percentile - 3.00, 75th percentile - 5.00, Valid N (listwise): 90 curve values are given.

TABLE 3. Reliability Statistics

Cronbach's Alpha Based on Standardized Items	N of Items
.658	5

Table 3 shows the Cronbach's Alpha Reliability result. The overall Cronbach's Alpha value for the model is .658 which indicates 66% reliability. From the literature review, the above 50% Cronbach's Alpha value model can be considered for analysis.

TABLE 4. Reliability Statistic Individual

	Cronbach's Alpha Individual
Computer supported cooperative learning	.587
Computer supported cooperative play	.656
E-learning	.536
Mobile & wireless games	.591
Mobile learning	.614

Table 4 Shows the Reliability Statistic individual parameter Cronbach's Alpha Reliability results. The Cronbach's Alpha value for Computer supported cooperative learning .587, Computer supported cooperative play .656, E-learning .536, Mobile & wireless games .591, Mobile learning .614 this indicates all the parameter can be considered for analysis.

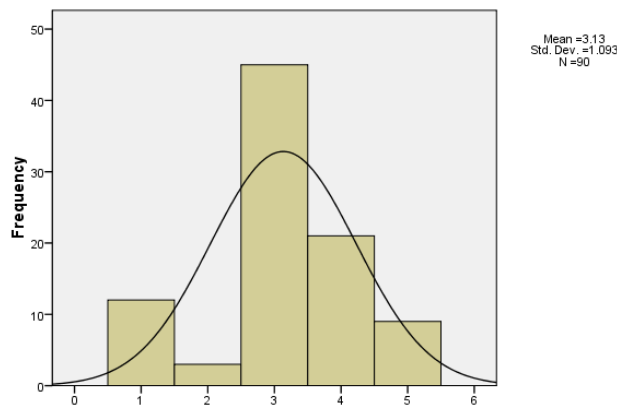


FIGURE 1. Computer supported cooperative learning

Figure 1 shows the histogram plot for Computer supported cooperative learning. From the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 3 for Computer supported cooperative learning except the 2 value all other values are under the normal curve shows model is significantly following normal distribution.

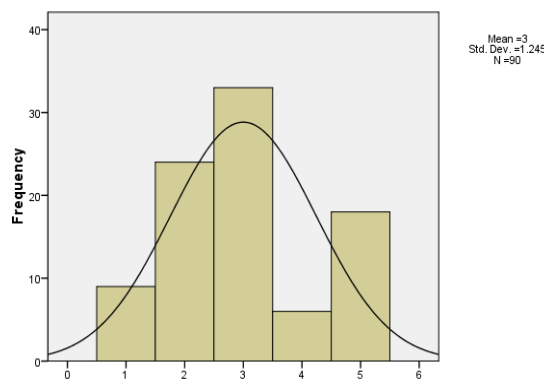


FIGURE 2. Computer supported cooperative play

Figure 2 shows the histogram plot for Computer supported cooperative play. From the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 3 for Computer supported cooperative play except the 2 value all other values are under the normal curve shows model is significantly following normal distribution.

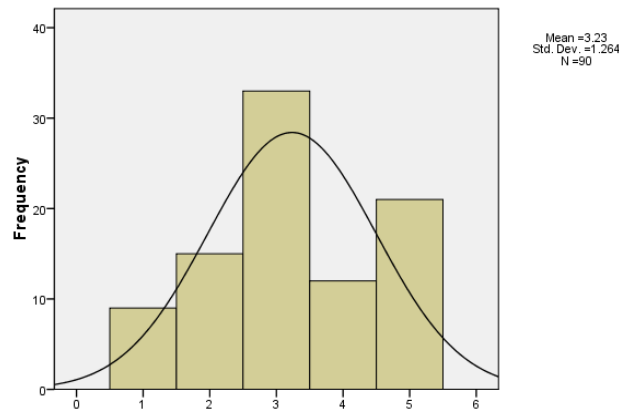


FIGURE 3. E-learning

Figure 3 shows the histogram plot for E-learning. From the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 3 for E-learning except the 3 value all other values are under the normal curve shows model is significantly following normal distribution.

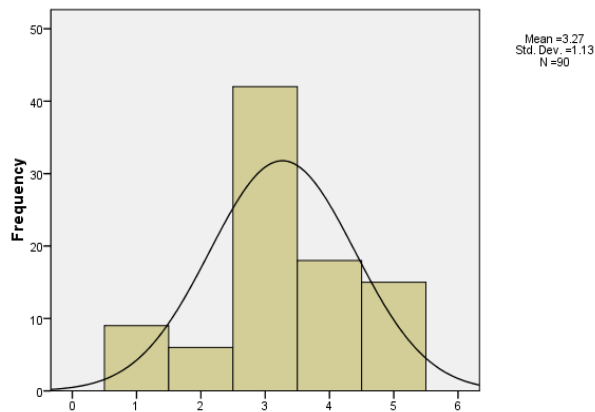


FIGURE 4. Mobile & wireless games

Figure 4 shows the histogram plot for Mobile & wireless games from the figure it is clearly seen that the data are slightly Left skewed due to more respondents chosen 3 for Mobile & wireless games except the 2 value all other values are under the normal curve shows model is significantly following normal distribution.

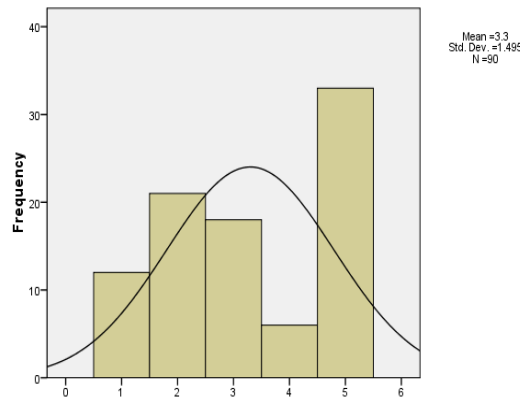


FIGURE 5. Mobile learning

Figure 5 shows the histogram plot for Mobile learning. From the figure it is clearly seen that the data are slightly Right skewed due to more respondent chosen 5 for Mobile learning except the 2 value all other values are under the normal curve shows model is significantly following normal distribution.

TABLE 5. Correlations

	Computer supported cooperative learning	Computer supported cooperative play	E-learning	Mobile & wireless games	Mobile learning
Computer supported cooperative learning	1	.149	.368**	.407**	.264*
Computer supported cooperative play	.149	1	.214*	.096	.290**
E-learning	.368**	.214*	1	.499**	.319**
Mobile & wireless games	.407**	.096	.499**	1	.172
Mobile learning	.264*	.290**	.319**	.172	1
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Table 5 shows the correlation between motivation parameters for Correlations significant at the 0.01 level: E-learning and Mobile & wireless games have a significant correlation of .499** at the 0.01 level. Computer supported cooperative learning and Mobile & wireless games have a significant correlation of .407** at the 0.01 level. Correlations significant at the 0.05 level: E-learning and Computer-supported cooperative learning have a significant correlation of .368** at the 0.05 level. E-learning and Mobile learning have a significant correlation of .319** at the 0.05 level. Computer-supported cooperative play and E-learning have a significant correlation of .214* at the 0.05 level. Computer-supported cooperative play and Mobile & wireless games have a significant correlation of .096 at the 0.05 level. Mobile & wireless games and Mobile learning have a significant correlation of .172 at the 0.05 level.

4. CONCLUSION

Learning motivations and mobile devices are closely interconnected in today's digital age. Smartphones and tablets mobile devices like, have significantly impacted the way people access information and engage in learning activities. Here are some key aspects to consider regarding learning motivations and their relationship with mobile devices: Accessibility: Mobile devices provide easy access to a vast amount of information and learning resources. Learners can access educational content from anywhere and at any time, which removes barriers to learning and motivates them to explore new subjects or topics. Convenience: The portability of mobile devices allows learners to fit learning activities into their busy schedules. Whether it's during a commute, waiting in line, or during breaks, people can engage in short learning sessions, making learning more manageable and appealing. Short lessons or

quizzes encourage learners to complete small tasks regularly, leading to a sense of accomplishment and sustained motivation. Social Learning: Mobile devices facilitate social interactions and collaborative learning. Social media, discussion forums, and educational communities enable learners to share knowledge, seek help, and learn from peers, fostering a sense of community and motivation to participate. Multimodal Learning: Mobile devices support this multimodal approach to learning caters to different learning preferences, making the learning experience more engaging and motivating. The Cronbach's Alpha Reliability result. The overall Cronbach's Alpha value for the model is .658 which indicates 66% reliability. From the literature review, the above 50% Cronbach's Alpha value model can be considered for analysis.

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