



The Impact of Visual Communication on Students' Learning Experience Towards Memory Recognition and Enhancement

Izzatun Nasywa Jamal*, Norsimaa Mustaffa**

*Department of New Media Communications, Faculty of Leadership and Management, 71800, Bandar Baru Nilai, Universiti Sains Islam Malaysia
E-mail: izzatunnasywa799@gmail.com

**Department of New Media Communications, Faculty of Leadership and Management, 71800, Bandar Baru Nilai, Universiti Sains Islam Malaysia
E-mail: norsimaamustaffa@usim.edu.my

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ABSTRACT

Visual communication is currently one of the most prevalent techniques of human contact. The difficulties facing contemporary education do not decrease its importance. As there is a correlation between good learning and the university environment, the emphasis has switched to better learning tools to guarantee that everyone receives good educations. In education, visual communication is commonly utilised. This is because the use of visual communication can help students retain information more efficiently. This study attempts to determine whether the visual communication elements affect students' performance. This study's primary objective is to determine the impact of visual communication elements on the learning process and memory enhancement. Shape, colour, and orientation of individual graphic elements are among the variables chosen and quantitative data was extracted and explicitly been analyse regarding effects on memory recognition during the learning process. The variable on memory enhancement of the student performance was adopted from the survey questionnaire. The research was conducted using a quantitative method, with a sample of 107 undergraduate students from 9 faculty at Universiti Sains Islam Malaysia (USIM). Data was collected through a survey and been analysed using SPSS. The outcomes of the study show positive correlation and suggest that visual communication elements can assist students in their learning experiences related to memory recognition and memory enhancement. This research contributes to the understanding on enhancing student's learning engagement and performance and can serve as a reference for educators and instructional designers in implementing visual communication elements in teaching and learning process.

Keywords: *Visual Communication, Learning Experience, Memory Enhancement, Quantitative Study*

INTRODUCTION

Given that a picture is worth a thousand words, visual communication is one of the most intriguing instruments in education, as stated by Tang (2020). One of the most recent innovations in education is the use of visual communication, which is particularly relevant in the modern world, where most education is done online. Understanding how to communicate effectively and efficiently meaning using visual representations is at the heart of visual communication. Visuals including diagrams, charts, signs, animations, graphic designs, and typefaces are only some of the many tools used to improve students' grasp of the material. Therefore, while they learn, pupils can generate, ponder, and develop concepts, ideas, and outcomes.

In USIM, visual communication is one of the tools largely used in online learning. Implementing digital classes fully online is done on platforms such as Google Meet, Zoom, and Microsoft Teams, where lecturers can share their graphic representations with the students. The benefits of studying face-to-face (direct teaching) outweigh indirect teaching through lecture videos. However, virtual learning can be improved by using visual communication. The researcher will contribute to the impacts of visual communication on students in USIM. Blended learning is used at USIM, which means that visual communication is used to improve teaching and social order (Ju & Mei, 2018).

According to Sless (2019), the educational process makes extensive use of visual materials, and it has never been possible to take advantage of such a wide variety of visual experiences and knowledge with such relative ease as it is today. The educational process extensively uses visual materials for several reasons, including this justification. One can access a wide variety of low-cost printing, photography, and electronic methods if one looks hard enough. People live in the age of visual information, characterised by the widespread incorporation of visual content into various aspects of daily life. The use of graphics in e-learning courses is necessary for student engagement. When the right pictures are used, they help people understand things better than words or sounds alone. This is because visuals break down information into smaller, easier-to-process chunks. Also, students often associate images with how they feel, which makes e-Learning courses more dramatic and memorable than they would be if they only used text.

A movement control order was issued in the third month of 2020, which prompted the entire USIM to migrate to do education and research entirely online. The students participated in a timed online session where they showed presentations from different sources. As a result, students and instructors can gain a better understanding of and respect for the role of visual communication in the larger context of the educational process. Because of the epidemic that hit the country, visual communication has become an even more critical part of learning for students worldwide.

This study aims to explore the impact of visual communication on the learning experience among Universiti Sains Islam Malaysia (USIM) students. To date, the research and understanding of this issue are limited. This is regarding the previous studies that only focused on exploring the impact of using learning media to enhance learning motivation in elementary schools in Purbalingga, Indonesia (Puspitarini et al., 2019). Meanwhile, another research from Vanichvasin (2020) only explores the impact of visual communication on memory recognition among Kasetsart University Freshmen students in Thailand. Both studies concentrate solely on employees and students of public and private educational institutions in Indonesia and Thailand, rather than Malaysian university students.

Hypothesis

H(1): Visual communication elements impact towards good learning experience among USIM students.

H(2): Visual communication elements leads to student's memory enhancement among USIM students.

Conceptual Framework

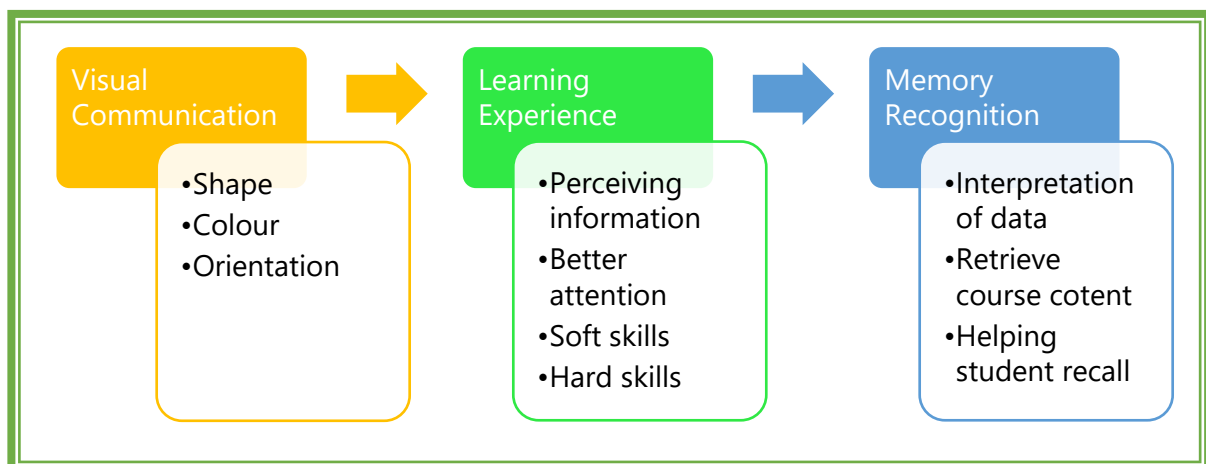


Figure 1: Conceptual Framework

LITERATURE REVIEW

The Concept of Visual Communication

Visual communication is described as the transfer of ideas and information utilising visual components in ways that can be read or watched, which is suggested by the name of the kind of communication itself, which is also called "visual communication." Most of its information is conveyed or expressed using signs, typography,

drawings, graphic design, infographics, industrial design, advertising, animation, diagrams, sketches, charts, photographs, videos, models, maps, objects, slide presentations, animation, illustration, colour, and electronic resources. a. It is a visual media in which sight is the only sense utilised. In addition, it investigates the idea that a visual message with text can more successfully affect someone or an audience, as well as assist them in connecting with information (Kujur & Singh, 2020). To communicate visually, one must possess both the ability to see and a brain that is capable of transmitting, processing, and deciphering all sensory information received (Choudhary, 2019). Visual communication aims to produce the highest-quality image at the lowest possible data rate. This allows people to see and understand what is being displayed and to convey what they have witnessed (Kim, 2020). According to Xu and Vaziri-Pashkam (2021), visual information accounts for 90 percent of all information given to the brain, and visual communication accounts for 75 percent of all information processed in the human brain. This indicates that the human brain can digest images 60,000 times more quickly than text. Therefore, the addition of visual components to content that is primarily written results in an improvement in communication (Vanichvasin, 2021).

According to this point of view, effective visual communication does need to incorporate the following three fundamental aspects: 1) an appeal, which should grab the audience's attention and engage it; 2) comprehension, which ought to produce a thorough understanding; and 3) retention, which ought to keep in mind and recall the data that is illustrated by visual communication (Tian, 2020).

The human brain is capable able of quickly recognising, storing, and recalling images because they contain two different codes: one that is visual and the other that is verbal. This allows the human brain to enshrine ideas effortlessly and subconsciously in long-term memory, and each concept is stored in a different part of the mind (Wulandari, 2018). The dual-coding nature of images allows for two independent ways of accessing visual memories, increasing the odds that one of them will be remembered. This is because visual and verbal memories are stored separately, and the best recall occurs when one can access one or the other. Additionally, since words only enter long-term memory with a single code, the best recall occurs when one can access one or the other (Rupp et al., 2019).

Elements of Visual Communication

The process of visual communication requires comprehension, as well as the transmission of meaning. To accomplish this goal, there are a variety of components that together make up visual communication. Visual communication can be broken down into its constituent parts, which are referred to as visual elements or components. These elements include colour, contour, texture, line, contrast, measurement, and value (Tian, 2020). This discussion centered on three critical aspects of visual com-

munication, namely colour, shape, and orientation. These are all essential to effective visual communication.

Colour

There are three different words that are used to define colour: hue, value, and intensity. The term given to a particular colour, such as red or blue, is referred to as its hue. The lightness or darkness of a colour is communicated through its value. The degree to which a colour is brilliant or subdued is referred to as the intensity of that colour (Schloss et al., 2018). Colour can convey information or elicit feelings, depending on several factors. Their perplexing problem with demographic differences has led to the setting of precautions in its application among researchers and designers (Foley et al., 2018).

Shape

Shapes can be created by connecting various lines. Words like "circle," "square," "triangle," and "freeform" are used to define various shapes. Forms can either have a single or several facets. The line generates shapes that are either flat or two-dimensional. Forms are another name for the more general category of three-dimensional shapes. While a circle is considered a shape, a ball is considered a form. In contrast to a square, which is considered a shape, a cube is considered a form. A sketch is a two-dimensional form, while a sculpture is a three-dimensional form (Sun & Zhu, 2022).

Orientation

Orientation can determine how important a visual element is. The elements of orientation are harmony, unity, rhythm, repetition, and diversity. The rule of thirds is a simple compositional tool for establishing visual equilibrium inside a photograph. This concept can be applied to collections of pictures as well (Scherer., 2015).

Interconnection Between Visual Communication Element and Learning Experience

An empirical study was conducted by Khan and Liu (2020) to determine the effect of colour on memory. Thirty South Asian English as a Second Language (ESL) students from a local university in China participated in the study. These students were randomly assigned to either the experimental group or the control group. The statistical analysis of the data highlights the fact that people's minds are naturally drawn to words and images that are written on colourful pages within an environment that is controlled. The findings lend credence to the hypothesis that, in the context of acquiring English collocations, colour may have a significant influence on one's working memory when it functions in the role of an environmental stimulus.

According to Putri (2019), the literature review findings indicate that presenting students with group supervision based on Gestalt theory can help develop their creative capacities within the learning framework. As a consequence of what has been covered up to this point, it should come as no surprise that the application of gestalt theory and the visual communication component can assist students in their pursuit of academic achievement.

Liu (2021) has carried out research on the application of multimedia components in visual communication art against the backdrop of the internet. In this research, the research result has shown that 53.2% of participants voted that visual and auditory enhance memory recognition. It is possible to say that communication through digital media enhances the communication effect of visual communication design. This enables designers to overcome the limits that paper media imposes on design thinking and opens more room for creative expression in the realm of design.

In research from Zheng (2022) investigates how contemporary visual communication designers are incorporating historical Chinese artifacts into their work. The findings of this research, which show that this trend is increasingly obvious in the planning and layout of cultural industrial parks, add further support to the argument that element texture is crucial in visual communication design. Standardisation has been developed on the aesthetics of stone walls. Since the wall's flat composition is the result of the stones' placement and mixing, its aesthetic features can be explored in detail. This research shows that it is possible to improve the presentation of positive content using visual communication by including textures.

The research conducted by Vanichvasin (2020) involved analysing the effectiveness of visual communication and how it affects memory improvement with 19 Thai undergraduate students. The research was conducted using an online course on communication skills that included visual communication. Visual communication has a high potential to be utilised in the classroom as an effective tool for teaching courses to boost student memory and, as a result, produce higher learning performance. This potential can be seen in the fact that there is a lot of opportunity for growth in this area. The findings of the research demonstrated that using visual communication created positive benefits in boosting student memory, which in turn generated increased learning for students.

Visual Communication in Education towards Memory Enhancement

At the beginning of the 1990s, the virtual reality technology industry was experiencing a boom on a global scale, and it would eventually emerge as its distinct area of research and development (Keshner et al., 2019). Information presented visually has a much higher chance of being understood and remembered by a person than information presented verbally. Since visuals make it easier to interpret the content and

focus attention, they improve memory recall more than courses that only present information in text form. This is because using visuals increases the retention of information significantly while also making it more likely that students will remember the material (Pi et al., 2021). Visual cues, therefore, aid in improving our ability to recall and retrieve information. Additionally, students who learn with aid of visual communication show greater interest in learning than those who are given texts (Carmichael et al., 2018).

Learning chances for pupils can be considerably improved by visual communication. Effective communication that is supported by visuals adding to the textual information can produce significantly positive learning outcomes, especially for learners who find the content engaging and authentic. This is because learning is facilitated when the visuals and texts work together to convey the instructional messages. Therefore, visual communication is regarded as an effective teaching strategy to transform a content- or text-based course into a visual-based one to facilitate learning, produce better learning experiences, and consequently improve performance. This is done to improve the overall quality of the educational experience (Vanichvasin, 2021).

Visual Communication and Learning Experiences

It has been shown that the ability to communicate effectively visually is vital to the education of university students. According to the findings of a study that was conducted by Sharif & Razif (2021), students who were instructed in visual communication while attending lectures had superior academic performance and higher rates of retention than the other group. Students could improve their grades and participate in extracurricular activities when they utilise the visual aids, diagrams, or animations that are supplied as part of visual communication instruction. According to Valentine et al. (2018), visual communication inspires active media users to connect with content that is based on images, which is advantageous for students who are enrolled in educational establishments.

Students have profited from learning that is both auditory and kinaesthetically effective using visual learning; however, studies will be more successful if they are provided visually. Kinaesthetic learning refers to the process of acquiring knowledge through physical activity, specifically through the manipulation of physical objects (Yusnanto & Rahayu, 2022).

Kinaesthetic learning can be illustrated by how a child first learns to ride a bike or swing when they are very young. If you compare a student who learns by viewing a video of someone else riding and another student who learns through kinesthetics, the student who learns by watching the video is most likely going to have a superior understanding of what is being taught. Visual learners have an advantage when it

comes to studying to retain information because they are more comfortable with visuals, photos, and graphs (Atsari, 2020).

Abdurahimovna (2020) says that to get the desired result, you should combine correct text writing with making maps, charts, and drawings that look good. Visual learning enhances comprehension by immediately activating and impacting cognitive abilities. This is the reason why visual learning is so effective. The human brain can handle more of it when new information is taken in, analysed, and understood. Abdurahimovna (2020) says that visuals like interesting movies, beautiful photos, and helpful infographics might help students get bored and motivate them to do better. The lesson's content is improved by using images, which also help pupils understand tough or complex concepts. It also helps get ideas across by giving the audience clear descriptions of places, people, or things from the real world. Visual communication makes it easier for students to understand new information when it is shown to them in a way they are already used to.

According to Ju and Mei (2018), using graphics when comparing many things side by side makes it easier to distinguish between identical content. Even when presented in an organised form, a list of distinctions can be difficult to explain and even more challenging to grasp. This is especially true for longer lists. When someone has several different images in one location, the audience will be better prepared to discuss how the content differs, leading to more in-depth discussions (Valentini et al., 2018). When describing a complicated project, it is helpful to use visual imagery since it helps set the scene. Imagine that someone was working on a project that had already undergone several revisions. If other people could envision the processes used as the project progressed, it would make it much simpler for them to understand the final processes. People can show how important certain steps are to finishing the project by telling how it went from the beginning to the end. People are free to use the time they would have spent previously detailing the full process for some other purpose now (Yusoff, Hassan & Zainun, 2020). With the assistance of visual communication, anyone may zero in on a specific topic and continue to keep the conversation on track. Long passages of text are commonly skimmed by readers, which might result in the readers missing essential information that was contained inside the passage. Visual aids are beneficial in lengthy presentations because they provide a respite for the eyes from reading text and enable the presenter to concentrate more closely on the most important aspects of the material being discussed (Ju & Mei, 2018).

Gestalt Theory

The gestalt theorists put a significant amount of weight on the importance of having a complete perception, which can only be accomplished by paying close attention to every stage of the learning process and giving everything careful consideration. The thinking process consisted of several different steps, including selecting, organizing,

interpreting, and developing meaning (Çeliköz et al., 2019; Pill & Hyndman, 2018). To determine whether developing insight learning in virtual learning was feasible, Jegathan and Shanmugam (2022) conducted their study. The information was gathered using Google forms, and the analysis was done using more than 700 responses from undergraduate students at Eastern University in Sri Lanka's Faculty of Arts and Culture. The most frequently cited factors contributing to psychological stress included long periods of staring at a computer or smartphone screen, financial limitations, an unfavourable home environment, and issues with accessing technology.

RESEARCH METHODOLOGY

Quantitative research was chosen as the methodology in this research. The research was conducted at the USIM located in the 71800 districts of Negeri Sembilan in Malaysia. The research focus was carried out online, and the only participants included in the analysis were USIM students. This location was helpful to the researcher in the study process since questionnaires were used to obtain data from respondents. It was decided to conduct this research at USIM because both the target population and the participants are all enrolled at the university. Study areas are geographic boundaries used to define the extent of data analysis. Researchers choose USIM to ensure that research data is confined to a specified area. The descriptive statistics using SPSS gives benefit because the data been organised systematically and portray in more depth and detail data statistically. Moreover, USIM is a place that matches the research objective as it supported researchers to reach out to students randomly on who will be the respondent. It was also an approachable area and strategic location for researchers to conduct data collection for the first phase.

A research design describes the steps taken to gather, analyse, present, and report study results. This study employs a quantitative research design methodology. With quantifiable data, it is feasible to determine the impact of visual communication on USIM's students' learning experience. Most quantitative research has defined and limited objectives, concentrating on a limited set of observable variables. This is in stark contrast to the whole approach of quantitative research. The primary objective of this study is to determine the impact of visual communication elements on the learning process and memory enhancement. Shape, colour, and orientation of individual graphic elements are among the variables chosen and quantitative data was extracted and explicitly been analyse regarding effects on memory recognition during the learning process. The collected data were analysed by a computer utilising Social Science Statistical Software (SPSS). Descriptive statistics, frequency count, mean, and standard deviation will be employed (Piedra, 2019).

The method used for this study is quantitative and uses a questionnaire to collect data. Individuals who receive a questionnaire are required to respond to a pre-written list of questions included in the questionnaire. In this research, random sampling is

used to collect information from individuals with specific knowledge and experience of using virtual communication. The researcher chose to employ questionnaires because the data can be processed and analysed more quickly and readily than with spoken data, which must be recorded and transcribed before being analysed.

The targeted population were students of undergraduates at USIM who did online learning since the Malaysian movement control order had been enforced. Students were given closed-ended questionnaires to respond on how the visual learning had impacted their learning and how it has enhanced the student's learning processes.

Probability sampling was used in this study. This study generates outcomes that are representative of the entire population of students at USIM. Thus, the researcher blasts the questionnaires to all USIM faculty. As the name suggests, a "simple random sample", this sample is used to describe a selection of individuals from a larger group drawn at random. Each member of the population is given an equal probability of getting sampled using this method. This is the simplest form of probability sampling because it just takes one random pick and very little background information on the population. In this research, the population is divided into smaller groups, based on the researcher's criteria, which is academic credentials.

FINDINGS AND DISCUSSIONS

Based on the table below, the gender consists of the 107 respondents, categorised into male and female students, as displayed in Table 1. There were male students who accounted for 43 of the totals and represented a percentage of 40.2%. On the other hand, there were female students who accounted for 64 of the totals and represented a percentage of 59.8%. This is because there was a substantial amount of participation from females.

Variable	Group	Frequency	Percent (%)
Gender	Male	43	40.2
	Female	64	59.8

Table 1: Gender

The second variable to be discussed is the age of the respondents who participated in the study. As we can see, the highest percentage came from the range of age between 21 to 23 years old with a total of 86 respondents accounting for 80.4% of the total, followed by the 18-20 years old and 24-26 years old, both of which have the same frequency, which is 10 for both age groups (9.3%). Finally, the lower is the range age between 27 and above years old with 1 of them, making up only 0.9% of the total covered the total respondents.

Variable	Group	Frequency	Percent (%)
Age	18-20	10	9.3
	21-23	86	80.4
	24-26	10	9.3
	27 and above	1	0.9

Table 2: Age

Aside from that, the year that USIM students first started their studies is also included in the questionnaire. On the back of the questionnaire, respondents can select one of four possible responses: year 1, year 2, year 3, or year 4. As a consequence of this, the students in year 4 had the most significant frequency value (73 students), and the percentage value for most years in this report was 68.2%, even though it had the second-highest frequency value of 20 students and accounted for 18.7% of year three students. In other words, year four students had the most significant frequency value. The value of the students who responded in Year 2 was the same as those who responded in Year 1, which was just seven students, reflecting 6.5% most usually. This is because the value of the respondents has been consistent across the two years.

Variable	Group	Frequency	Percent (%)
Year of Study	Year 1	7	6.5
	Year 2	7	6.5
	Year 3	20	18.7
	Year 4	73	68.2

Table 3: Year of Study

In conclusion, this survey comprises responses from students enrolled in USIM's nine faculties. The students from the Faculty of Leadership and Management, which has a total of 63 students, were the ones who responded to this poll in the most significant numbers with total of 57.9%. Following that, the Faculty of Science and Technology has 11 students, which accounts for 10.3% of the total, and then the Faculty of Major Language Studies has 10 students, which accounts for 9.3% of the total. In addition, 7 students from the Faculty of Quranic and Sunnah Studies account for 6.5% of the total replies. The Faculty of Economics and Muamalat came next, with 6 students and 6.5% of the total. In the meantime, for the Faculty of Shariah and Law, the number of students who participated in this poll was 5, or 4.7%. Finally, 3 students from the Faculty of Medicine and Health Science made up the remaining 2.8% of the group. In conclusion, within the Faculty of Engineering and Built Environment, they make up barely 2 students or 1.9% of the total population of students.

Variable	Group	Frequency	Percent (%)
Faculty	Faculty of Quranic & Sunnah Studies	7	6.5%
	Faculty of Leadership & Management	63	57.9%

ment		
Faculty of Syariah & Law	5	4.7%
Faculty of Economics & Muamalat	6	6.5%
Faculty of Science & Technology	11	10.3%
Faculty of Medicine & Health Science	3	2.8%
Faculty of Major Language Studies	10	9.3%
Faculty of Dentistry	0	0%
Faculty of Engineering & Built Environment	2	1.9%

Table 4: Faculty

Table 5 reveals that item four has the highest mean with a value of 4.21 and a standard deviation of 0.801. This demonstrates that 46 % of most students think that the aspect of shape can assist them quickly comprehending how various pieces fit together due to their good form organisation; this item received the largest number of affirmative votes. The mean value of 3.97 is the lowest value. This item reveals that 39% of students strongly agree with the statement, "I am familiar with all the aspects and principles of visual communication, such as colour, shape, and balance." Therefore, based on this assertion, the majority of USIM students believe they have knowledge of visual communication elements.

Question	Mean	Std Deviation
I am aware of all the elements and principles of visual communication, such as colour, shape, balance, and others.	3.97	1.086
I often use visual communication elements and principles (such as proportion) in my learning environments.	4.04	.889
I am more easily focused on bright colours although it might be distracting in some learning situations.	3.99	.986
The element of shape makes me easy to understand how certain parts fit together by their good form arrangement.	4.21	.801
The selection of a balanced visual composition draws my attention and creates a sense of equilibrium in an image.	4.12	.786

Table 5: Visual Communication

Table 6 displays a mean, and standard deviation for the impact of a student's learning experience because of memory recognition. Items 1, 2, and 3 all have a value of 4.36, which is the highest average mean. The standard deviation for item 1 is .768, the standard deviation for item 2 is .780, and the standard deviation for item 3 is .719. Items 1, 2, and 3 all have the same value. In the meantime, the percentage of people who strongly agree with the scores for items 1, 2, and 3 is the highest. A score of 50% was received for items 1 and 3, while the score for item 2 was 51%. In addition, item 2 in Table 6 has the lowest mean value, 4.22, and the smallest standard deviation, 0.789%. According to this statement, 44% of students strongly think they are more likely to retain information when visual communication is incorporated into learning sessions.

Question	Mean	Std Deviation
Visual communications help towards my memory recognition.	4.36	.768
Visual communications make me easy to recall, remember, recap, and retrieve course content.	4.36	.780
The use of colour, shape, and balance help in my memory recognition.	4.36	.719
I am more likely to retain information if visual communication elements are included in my learning sessions.	4.22	.816
My experience has shown me that visual communications make learning easier.	4.29	.789

Table 6: The impact of student's learning experience through memory recognition

In table 7, item 5 has a value of 4.30, the highest average mean, with a standard deviation of 0.755. There is a strong correlation between the total percentage value and the value of 45%. This discusses how visual communication features can help people remember, understand, review, and find course material. Finally, 4.03 is the value with the lowest mean. Item 2 of the sentence received the lowest grade. According to the statistics, 40 percent of respondents agreed that "Element shape is essential for memory enhancement."

Question	Mean	Std Deviation
The variety of colour shades aids my memory enhancement.	4.15	.867
Element shape is crucial in helping memory enhancement.	4.03	.895

Element orientation can gain memory enhancement.	4.12	.844
Content summary in visual communications used helps memory enhancement.	4.24	.763
Easiness to recall, remember, recap, and retrieve course content thru visual communication elements.	4.30	.755
The content's consistent orientation makes it simple for me to recall its context.	4.24	.799

Table 7: Students memory enhancement

Correlation Analysis

The data from 107 respondents shows a positive correlation and a significant ($p < 0.01$) which is 0.000. The relationship between these two goals is strong and ir-related. The meaning of r has a beneficial relationship with r and there is a significant between the impact of element in visual communications on the learning experience among USIM students. $r = .718$, $n=107$, $p < 0.01$. Moreover, there is a positive significance between the impact of element in visual communication on memory enhancement which is also strong and ir-related. $r = .748$, $n=107$, $p < 0.01$. This means that the impact of elements in visual communication on learning experience and memory enhancement influenced USIM students.

There was a positive and strong relationship between visual communication on learning experience and memory enhancement among USIM students. Hence, the result indicates that students who apply visual communication to learning can enhance their memory recognition. In other words, visual communication can help students learn and memorise. So, it can be said that the frequency of using visual communication can positively impact the learning experience and memory recognition among USIM students.

CONCLUSIONS AND IMPLICATIONS

This research has shown that students at USIM have a significant connection between their learning experience through memory enhancement and the elements of colour, shape, and orientation. This was shown to be the scenario when the element of visual communication was examined. Additionally, it has come to light that the element of visual communication influences the improvement of students' memories who are educated at USIM. It is impossible to argue that the phenomenon of visual communication should not be incorporated into the process of teaching and learning for students. Regarding the element of visual communication known as the elements

(colour, shape, and orientation), given that the correlation between this variable and the learning experiences of students and the improvement of their memories is significant in relation to this study, it is possible that future research will take into consideration investigating the other aspects of visual communication known as the elements within a more expanding scope of research by involving a greater number of people.

The outcomes of the study allow for the formulation of some ideas for the conduct of more research. The impact that visual communication has on the learning experience was investigated first through the process of memory recognition. Consequently, it is probable that a second study will be conducted to analyse memory tests to confirm the findings. This is because time may influence a student's ability to remember information. The future phases of the study project must take into consideration the findings of an investigation into the breadth of visual communication. For their findings to reflect the community more accurately, the researchers in this study select a larger study site as the research is conducted. It is suggested that the investigation be expanded by including first-year students from multiple Malaysian universities. This was one of the suggestions provided by the researcher that the questionnaire form should have been made available sooner. This is because the process of distributing questionnaires to responders and subsequently collecting them back would be time-consuming. It will take longer to collect replies if the sample size is big, particularly if the survey is conducted online; this will make the procedure more time-consuming.

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