

Effects of Photojournalism on Reader's Exposure and Retention

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Abstract

This research study focuses on the selective retention and selective exposure theories. This study also aims to testify that picture have great impact on the process of retention and selection of news stories. Images which are related to the text of the news story have great amount of information retention. Photos which are irrelevant to the text have intermediate amount of information retention. And news which are only text have minimum amount of information retention. The study formulates the selective exposure and selective retention theories by applying experimental research method to the population of Bahauddin Zakariya University, Multan. Study also proves that images have great impact on selection of news story to be read first. News with images have more chances to be selected first for exposure. While size of image is also important factor in selection of news story. News with bigger size image is selected first for exposure while image with smaller size have less chance to be selected first for exposure. For this study 150 subjects were selected from the population. Findings strongly support the theories of selective retention and selective exposure.

Keywords: Photojournalism; Selective exposure; Selective retention; Citizen journalism; Accompanying photograph; Image size

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Introduction

Photojournalism is a modern form of journalism. It includes production of images related to news events in order to develop better understanding of event in reader's mind. Photojournalism is "the practice of communicating news by photographs" (Oxford dictionary). This is most universal form of mass media as even illiterate person can understand depth and intensity of issue by simply having a glance over photo. Photographs are used with accompanying text to establish better understanding about event in reader's mind. "Photojournalism is agent of change in our society forming visual narratives and feature stories that help to illuminate and clarify the issue with a depth and perspective that no other mass medium can achieve because it captures time".

"Photojournalist is a person who performs the practice of photojournalism. Photojournalist capture verbs (actions) while photographer capture nouns (places, persons, objects)". Noun is easy to capture but actions are difficult to capture. Photojournalist capture the photo related to the story and then photo itself become the story. Another element of modern day photojournalism that is still working its kinks out is the huge increase in "CITIZEN JOURNALISM". These days everybody owns a camera, even if only a camera phone. This means that more

and more events are documented as they happened my random people who just happen to be in the right place at the right time.

"The combination of photography and journalism, or photojournalism - a term coined by Frank Luther Mott, historian and dean of the University of Missouri School of Journalism. This practice started in 1853 when first known photojournalist Carol Szathmari documented Crimean War".

Retention is "the action of absorbing and continuing to hold a substance" (Google definitions.). In mass media retention is that how long the reader keeps articles and news in its mind [1]. Through graphics and images related to news stories helps a lot in building perception about issue and if a person are having perception about any issue then that news related to that issue will remain in one's mind for long period.

There are some news happening that people cannot witness them first hand, but accompanying image with the news helps us to view and practice these news events. Images have great effect on readers, they are used by editors to set agenda of public because they know news with images will be popular among reader, they will have perception about those issues and considered them important [2]. "The growing use of imagery in news reporting and daily life has been characterized a picture flood" [3].

Images remains in memory more easily and for longer period of time than text, that's why images have strong effect on our perception, judgment and our retention [2]. It is widely understood and accepted that images used in news can "stir emotions and foster public outcry like no other means of expression".

It is a fact that then images of major events and movements play important role that people remember them for a long time. The event of Lal Masjid is still remembered by the public, images of Lal Masjid operations were continuously published by print media at that time. "And these images of Lal Masjid operation become become the part of collective memory of all Pakistani's for years to come". Images in newspaper also play important role in movement of restoration of Chief Justice Iftkhar Chaudhry. Photos related to the movement is given a large space in the newspapers so result of these photos was that they effect masses a lot and people in large numbers participate in this movement which cause great pressure on government and government decided to restore the chief justice. Similarly on many occasions print media photographs play very important role in arousing emotions among public. "When the picture of Benazir Bhutto dead body was published in newspaper it caused increase in sorrow among her supporters". Recently the pictures of drought in Thar when published in Pakistan print media then they arouse sympathy among people and these emotions cause retention of news events among public. And these emotions can only be aroused by the photos of verbs (Photojournalism). So photojournalism has great effects on people and due to these effects people retain news.

Many mass communication theories provide justification of consumption of specific media content. Selective exposure, selective retention and information processing are theories that provide relevant information with this research.

Selective exposure is theory of mass communication that explain that media users expose or select only those messages that are according to existed beliefs, ideas and perceptions. People select those information and news which are best suited with their already held ideas beliefs and attitudes and they do this to avoid dissonance. So in my research I'll see that readers only expose that newspaper news that have related photograph with it. And also prefer to expose those news which have bigger size image

Selective Retention is theory readers only remember or retain those information from the media that are similar or somehow similar to their interests, existed beliefs and ideas. People memorize those information and news for longer period of time which are consistent with their already exist ideas, attitudes and interests so the research will after observe the phenomenon of selective exposure of media content. Which news are retained in the memory of readers for long time. News with images or without images.

Limitation of study

The sample is youth (male and female) who are qualified can read newspaper. So researcher has chosen BZU students as sample of research.

Rational of the study

The basic reason for conducting this research is to define the importance and worth of images and pictures in the journalistic practice especially in print media. Images can capture specific important events and moments. Now-a-days every person has a camera which can be in the form of mobile phones, digital cameras, tablets etc. This makes every person paparazzi (Photographer). Images are usually used by peoples because they want to store important moments of their life. Similarly images in print media are very important in process of memory and retention because people remember and believe what they see through their eyes. Researcher selected this topic for research so that role of images and their importance in print media should be explained as they are also important factor is selective retention and selective exposure of news content.

Objectives of the study

- To identify photojournalism as important variables which effect retention of specific news stories.
- To establish relationship between news stories persistence in reader's memory and images related to these news stories.
- To determine that which news story is most appealing near the readers, with imageries or without imageries.
- To assess the attitude of reader towards news stories with images and news stories without images.
- To describe the importance of images related with news stories.

Review of Literature

Draper was curriculum consultant. In his book he said that visuals drive us towards memorization, retention and understanding about anything. Visuals help us to recall the phenomenon to which image is associated. After watching the images it becomes the part of our comprehension and we can easily recall minor and major facts about that image. Visuals provide us with prior knowledge about subjects and phenomenon so can be retained in memory.

Oates and Reder [4] conducted research to know in which condition inferior effect of images on retention than text. They proved this by conducting experiment they provide subjects with list of 60 words and 60 images. Each picture and word is shown for 2 seconds then after showing all words and pictures they found out subjects remembered the words which are written in unique font style and pictures are less remembered because text with unique font style got more attention.

Udomon et al. analyzed the effect of visual and audio on memory and recall. They divided sample into 2 groups. Group A is provided with audio recording of 30 words. Group B is shown pictures and visuals of same 30 objects. Then they ask both groups to write down the name of objects they heard and they visualize. They concluded that visuals have high level of information retention. Visual stimuli are more effective than audio stimuli in the process

of memory and recall. They observed that group B who are exposed with visuals recalled more objects than the individuals who heard the audio name of such words. They also said that if individuals are exposed with multimodal stimuli (with both audio and visual) then memory process will be more effective. And memory process is less effective when stimuli is unimodal.

Morrison et al. [5] in their research article explored how instructions given by images are beneficial for memory and retention. They conducted experiment on 60 undergraduate students in which 44 are females and 6 are males. Their research results are different from other researches they said that images are not very helpful in information recall. But images which are extra ordinary and provide us important and unique information can be recalled. Not every image has capability to recall but images which are extra ordinary.

Schulz and Omweri [6] studied the effect of business images on customer retention. They concluded that images play important role in enhancing customer retention. 66% respondents said that employee training play important role in enhancing customer retention. 24% said that images play important role in enhancing customer retention. 8% are neutral and 1% denied that images play important role in enhancing customer retention. They said that top management roles are required in building business images. They also conclude that use of technology in building business images also enhance the retention of customers.

Walker and Zaid [7] studied the effects of sex appeals on retention and buying behavior of consumer. They selected 37 college students as a sample. They had shown each student electronic and print advertisement. Sexual electronic and print advertisements and neutral electronic and print advertisements are shown to each student. Then they conducted survey about the shown advertisements. They concluded that sexual photos and videos of models enhance the retention of consumer of advertisement. They also observed that pictures of sexual advertisements are recall by the student more than neutral pictures of ads. They also suggested that advertisers should use such techniques in their ads so that their ads will be retained by the consumers and they more likely to purchase that product.

Flaitz [8] examined the effect of text and images on retention of incidental vocabulary while they are reading articles online. He observed that three types of things are used for vocabulary retention. This included images, text and combination of text along with images. He concluded that image and text altogether have great impact on retention of vocabulary. While text only articles has least impact on vocabulary retention. Only pictures also play important role in retention of incidental vocabulary.

Arpan et al. [9] analyzed the effects of images on social protests prior attitudes. Newspaper consumer can't understand the facts of story as clearly if story is in text as they understand in images. Images are more effective in the sense of memorization process. Visuals help us to information recall and attention towards the specific story. Visuals are given with specific news stories in newspaper so that consumer can recall that news stories. If they recall these stories they have point of view on that issue that's why memory of visuals also helps in framing process.

Cookman [10] in his book said that photojournalism can be described by a phrase "mirror with a memory". Photographs serve as mirror for our future generations. One photograph about incident reflects ton of details about the original scene. Photojournalism serves as memory chip for our future generations. It has great worth in journalistic process.

Klinger [11] in his research article explored the effect of images on process of memory and learning. He in his research article said that information which are learnt through written text can be easily be forgotten but memory of images and learning we done through images is can't be lost easily. Memory loss I case of images is very less than text. Images serve as higher order organizers. Newspaper stories which are text only are difficult to recall and memorize than stories which also have images with it. Images are significantly beneficial in process of memory and learning.

CISCO in their article stated that individual remembered 20% what he heard. 10% what he read. 30% what he saw. And 50% what he saw and heard. Our mind process visuals differently as compared to audio and text. Through visuals we can remember concrete as well as abstract concepts. Images have capability to easily store themselves in our long term memory. So they concluded that images play important role in learning. Sounds and text increase cognitive load and can't be easily remembered.

Richards [12] in his article said that three tools can increase the memorization process. Repetition of anything, images and patterns can enhance the memorization process. One can easily recall the information related to images. All type of images weather visual image or motor image are having great effect on retention.

Bruder [13] conducted research to find the effects of newspaper images on reader's retention. He chooses 50 students from each science, math, history and political science classes. And provide 50 students a front page of newspaper. Other 50 students are provided by manipulated version of newspaper in which text and image of news do not relate with each other. 50 students get a copy of same newspaper page which include graphics version of news. And other 50 received copy of newspaper which only included text and no images. Each set of participant read newspaper for 10 minutes and then Bruder asked question to check their retention of news events. He conclude article or news which has related image with it have most information retention among the reader. News which has unrelated image with it will have intermediate level of retention. News stories with graphics also have intermediate level of retention and news which included text only will have least level of information retention.

Grey [14] said that portraits are usually used with articles in newspapers and magazines. They make article attractive. Different effects are added to portrait to make it unique like focus, over exposure, black and white, infrared effect and oil tint etc. these portraits with these unique effects make articles remembered and readers also share information written in articles with others.

Bucher and Schumacher [15] used eye tracking technique to find out that which news in online and printed newspaper gain reader's

attention. Eye tracking device examine the eye movement which tell us which news got reader attention. Eye tracking device also use to observe sequence of news stories consumption. This device with the help of eye ball movement tracked the area of newspaper where reader is looking. They came to conclusion that images play important role in selection of news. Size of photos also gained readers attention. Image with big size grab more attention than image with smaller size. So the sequence of news attention is that reader first select news with greater images and then move towards smaller images. They also say that selection is three-dimensional process which include perception, retention and exposure. If news with image is selected for exposure then it is most likely that reader will have perception about the issue and most likely if reader built perception about issue it will remain in memory for long period of time.

Stenberg [16] examined the effect of pictures on explicit memory. He said that pictures are having edge over the text in process of retention. Pictures remain in memory long as compared to text. He concluded that images increase our conceptual memory as well as perceptual memory. He also said that images can built our concepts and can strengthen already held concepts in our mind. He conducted three experiments and results prove that pictures are superior to words in building conceptual memory. So image plays important role in building explicit memory (Conceptual and perceptual memory).

Mendelson [16] conducted a research to know effects of verbalizers and visualizers of newspapers. The results of research are entirely different from the previous researches. The high visualization of newspaper do not increase recall score of news or visuals have no effect on memory. News which included verbalization had most interesting near the readers. News which included more verbalization has high recall score than stories which include visuals.

Zelizer [17] in his article addressed the role of images on public memory. In certain situation images become more effective than words. He examined the pictures of 9/11 attacks on twin towers of world trade center. The photo of man had been jumping from world trade center which is captured by the photojournalist of Associated Press of America whose name is Richard Drew. 2nd photo he selected is of that people in world trade center after attacks are watching outside the window and thinking whether they should die of fire or by jumping from the window. This photo is captured by the photojournalist of Reuters whose name is Jeff Christensen. 3rd photo he selected is of when 2nd plane is going to be crashed on 2nd tower of World Trade Center. That is captured by Sean Adair who is photojournalist of Reuters. He says these "about to die photos" of 9/11 attacks when repeatedly given on front page of US and international newspapers move these pictures into memory of readers. People all around the world still remembered this horrific event due to these photos. And this collective memory of world trade center incident made this event great not in history of United States but in history of world. That's why "visual becomes an effective mode of relay about the past and a key vehicle of memory".

Cherney [18] conducted experiment to check the memory recall of stereotyped sex toys pictures. They selected 130 adults of age 5 to 13 years old. Sample contained males as well as females. She showed them stationery and non-stationery 36 pictures of sex toys. Half of participants are asked to remember the pictures and half of them are asked nothing. She concluded that adults remembered stationery images more than non-stationery images. She also find out that intentional memorization is more than incidental memorization. So individuals memorize or retain more when they are having intension to remember.

Knobloch et al. [2] analyzed the how images effects the selective reading of online magazines. They created artificial online articles which looked like real online articles. They also made some manipulation in articles by adding images. They observed that articles which have related images with them are selected by readers. Images increase the selective exposure of articles. Articles which are only text have least exposure. Because these articles do not grab reader attention, so images play vital role in selective reading of news articles.

Papadimitrious [19] is his articles discussed about how images affect the memory, attention and learning behavior of children. He said that images in print format played very important role in memory building of children. Animated and dynamic pictures specially have great impact retention and recall. Children learn a lot through images and this is call "Visual literacy". Images enhance the motivation of children and increase the level of memorization which is not very high in case of words.

Lundqvist and Holmqvist conducted a research to establish a relation between size of images in newspaper and their effect on process of selective exposure, selective perception and selective retention. They conclude that image size have great effect to draw reader attention, then reader built perception about issue which have large images related to then and reader also retain these news stories for long time. Large newspaper images have also great effect on retention of information about any news. Greater the size of image greater the chances of selective exposure, selective perception and selective retention of information. They said that image size is 50% important variable for these three processes.

Rajaram [20] examined which factors affect our memory. He conducted 4 experiments. He came to conclusion that images built our concepts. He also said that concrete words also have strong effects on conceptual development. Images and concrete words affect our implicit and explicit memory. And positive images have greater effect on memory than negative one. Similarly concrete images and words have more effect on retention than abstract one.

Parrish [21] in his book said that photojournalism stops time and allow individuals to witness things. Photographs enhance our memory and retention because it gives us sensation of reality. Photos in newspaper enhance emotions as well as recall of news stories.

Mendelson [22] tried to find out that how novelty in news photographs effects retention and attention of viewer. He

performed two different experiments on students of different journalism courses of advertisement and news writing. He explored that news with images which have factor of novelty will attract reader's attention and will retain for long period. He said news editors should give more space to images of issues behind any event which create novelty and newness in that event and remain in readers mind for long term. Or new angle of issue should be explored in image so that reader take interest if same image is shown again and again then image as well as issue loose importance.

Wright said that photos have property to record time and space so that events become the part of visions in human memory. Photojournalism is realistic form of journalism. Images and photos can increase retention of events to which they are associated.

Costley [23] conducted research that how images in advertisement effect the long term memory of consumer. He conducted two experiments. He provide sample with photos of ads along with the audio recording related to it. And in other experiment he only shows then pictures of advertisements. He concluded that visuals in advertisement enhance the consumer long term retention. He also say if u add text with pictures or audio stimuli with the pictures it also increase memory about that particular advertisement. He also suggested that for good advertisement of goods companies should add interactive pictures on packages of the goods it will increase retention about the product in buyers mind. Pictures have strong and immediate effects on long term memory in term of advertisements.

Baggett said that visuals and written material have different level of retention. She contends that visual representations contain more information and are "bushier". Whereas the statement "red leaf" contains only the name of an object and a modifier, a mental representation of a "red leaf" obtained from a picture carries with it information about size, color, shape, etc. Also, the visual representation has more "pegs" which can be used to associate it with information already in long-term memory. These additional associations also make it more memorable.

Wolf and Grotta conducted a research to check the retention of news of newspaper. He provided undergraduate students with three manipulated version of campus newspaper. In first version the leading story is campus dancer who got scholarship with the profile picture. In second version he provide students with newspaper page in which same story of dancer is presented with picture in grand jeté ballet leap. 3rd version included same news as leading story with irrelevant campus art show picture. They asked students the newspaper as they normally do. Then he checked their retention and attention level. He observed that 82% read and retain news of dancer with profile picture. And 48% recall the photo of unrelated art show. He says that indeed grand jet ballet leap is most photojournalistic of all photos. But students do not take interest in it because face of dancer is not prominent in that picture. He defined this situation as "no image control condition".

Zillmann [3] in his book said that selective exposure is a behavior that is deliberately performed to attain and sustain perceptual

control over particular stimulus events. Images are important factor in selective exposure of news stories in print media. Bigger the image size greater the chances of selection of news story to be read first. Most of the readers only exposed those news stories which have related photograph with it.

Childrens and Houston [24] studied how photos in advertisement are superior to text to effect on consumer memory. They selected 271 university students of journalism and show them advertisement and then ask them to recall the ads shown to them. Print advertisements which are only text are not recalled by the subjects while advertisements which include both text and pictures retain in memory for long term and also recalled by the subjects.

Cornell [25] analyzed the infants that which images retain them immediately and which images have delayed retention. He selected 115 infants and there age is between 22 to 27 weeks (median of age is 24). Half of them are boys and half are girls. He assembled different pictures in living rooms of the infant children. They hand photos in their living room and left the babies there to check their attention towards these photos. Observer who is covert is observing the pattern of the babies watching these photos. Results suggests that images which are noval and unusual is exposed by babies more and these photos are remembered by the infants immediately while photos which are black and white and are not unusual have delayed retention and exposed less by infants.

Baggett [26] analyzed the memory recall rate of visuals and written material. He divided selected sample into two groups. One group saw the whole film "The Red Balloon". And other group only listen the audio version of the film. Then he asked the subjects of both groups to write the summery of the film. He observed that group which is exposed with audio along with visuals of the film can remember and recall more information and details about the film than the group who is only exposed with audio(without visuals).

Statement of the problem

Images in newspapers affect the process of selective exposure and selective retention.

Research questions

- How do image influence newspaper reader's retention of news story?
- How do images unrelated to news story influence reader's retention?
- How much information is retained by the readers when the news is purely text (without images)?
- How do pictures effect in selection of news story?
- What is the level of retention of news chosen at second and third number?
- Does size of images play important role in selection of news story?

Hypothesis

H1: It is more likely that news story which includes a related, accompanying photograph with text will have the most information retention among readers than news without photograph

H2: It is more likely that news story which includes an accompanying photograph unrelated to the text will have a low level of information retention than news with related, accompanying photograph with text.

H3: It is more likely that news story which are purely text (no photograph or graphic) will have the least amount of information retention than news with images either related or unrelated.

H4: It is more likely that images either related or unrelated to text is most effective factor in selection of news story.

H5: It is more likely that retention of 2nd and 3rd news story read is much for news with images and less in text only stories.

H6: It is more likely that news with bigger size images are selected first for exposure than news with small size images.

Method

Research design and sample selection

By keeping in view the objectives, need and nature of research researcher selected experimental method as a research technique and methodology. Researcher designed three types of newspaper to check retention of images in newspapers. All three newspapers designed are having same news stories. These newspapers consist of news stories from "Daily Khabrain" of 11th May 29, 2014 [27].

The first newspaper contains news only in text form. There is no image present in that newspaper. All news and advertisements are in text form. This newspaper is designed to compare the retention of text and images of news events. This newspaper is named as newspaper no. 1.

Second newspaper consists of same news stories but a new story consists of irrelevant pictures. Every picture in that newspaper is contrary to the text of the news story. This newspaper is designed to check the retention of news when they consist of images which are irrelevant to text. This newspaper is named as newspaper no. 2.

Third newspaper consists of news with the original and relevant pictures. This is original newspaper which is manipulated to create newspaper no. 1 and 2. This newspaper is designed to check the memory of news which consists of relevant and original pictures published in newspaper. This newspaper is named as newspaper no. 3 [28].

As discussed above there are three types of newspaper. So each newspaper is given to then 50 students during experiment.

The sample selected by researcher on which this experimental technique is applied is 150 youth students of Bahaudin Zakariya University, Multan. Sample is selected from the population by

using simple random sampling technique with replacement. The results can be generalized on the large population [29]. The researcher is quite confident that the data could be applicable in other areas as well.

Researcher provided sample with these three newspapers making sure one individual received only on newspaper and asked them to read it as they read newspaper in their daily routine. Then researcher took back then newspapers. After that they are provided with questionnaire which consists of question to check retention of these three newspapers [30].

Questionnaire consists of six open ended questions which in constructed in a way that respondents cannot understand the purpose of research which helps to get impartial and balanced results.

So this experimental method helped researcher to understand separately the retention level of news stories which are only text, news which consists of irrelevant images and news which consists of relevant images [31].

Empirical Finding

Interpretation

Table 1 shows newspaper no. 1 which includes images only in text form, only 17.5% reader remembers maximum details about news stories. While newspaper no. 2 which includes images unrelated to text 20.5% remembers maximum details about the news stories. While newspaper no. 3 which includes accompanying photograph related to the text have maximum amount of information retention that is 47.5% [32].

So **Table 1** shows newspaper no. 3 have highest percentage to recall maximum details about news story. Hence from this H1 which that retention of news which have accompanying photo related to text have maximum amount of information retention is accepted and proved.

Table 2 proves our H2 which is news which include accompanying photo irrelevant to text have intermediate amount of information

Table 1. Retention of news which includes accompanying photograph related to the text.

Newspaper	Maximum Details	Intermediate Details	Minimum Details	Irrelevant Details
Newspaper No.1*	17.5%	20%	32.5%	32.5%
Newspaper No.2**	20.5%	22%	42.5%	15%
Newspaper No.3***	47.5%	27.5%	17.5%	7.5%

*Newspaper No. 1 carries news only in text form.

**Newspaper No. 2 carries news with irrelevant images.

***Newspaper No. 3 carries news with relevant images.

Table 2. Retention of news which includes accompanying photograph irrelevant to the text.

Newspaper	Maximum Details	Intermediate Details	Minimum Details
Newspaper No. 1	17.5%	17.5%	65%
Newspaper No. 2	15.5%	57.5%	27%
Newspaper No. 3	47.5%	27.5%	25%

retention. Newspaper no. 1 which includes text only news, 17.5% individuals remembers intermediate details about news story. While newspaper no. 3 which includes relevant photographs with news, 27.5% individuals remember intermediate details about news story. And in newspaper no. 2 which has unrelated photographs with news stories have, 57.5% individuals remember intermediate details about news.

So from **Table 2**, H2 is accepted that news which includes accompanying photograph irrelevant to the text have intermediate level of information retention

Table 3 shows that newspaper no. 1 which include news story with purely text have maximum amount of irrelevant information that is 27.5%. That is more than newspaper no. 2 (include unrelated images) and newspaper no. 3 (which include related images to news).

So **Table 3** proves H3 that news stories which are purely text will have least amount of information retention hence H3 is accepted

Table 4 proves that image is most important factor is selection of specific news story. In case of newspaper no. 2 which includes irrelevant images 27.5% individuals selected news stories to exposed on the basis of images. And in newspaper no. 3 which includes relevant images 35% selected news stories to read on the basis of images.

H4 is proved from **Table 4** that image is most effective factor in selection of news stories. From **Table 5** it can observe that 57.5% individuals didn't remember second and third news story in case of newspaper no. 1 which is purely text. In newspaper no. 2 which

Table 3. Retention of news which are purely text.

Newspaper	Maximum Details	Intermediate Details	Minimum Details	Irrelevant Details
Newspaper No. 1*	15%	15%	17.5%	27.5%
Newspaper No. 2**	20%	20%	35%	25%
Newspaper No. 3***	37.5%	27.5%	20%	15%

*Newspaper No. 1 carries news only in text form.

**Newspaper No. 2 carries news with irrelevant images.

***Newspaper No. 3 carries news with relevant images.

Table 4. Images as important factor in selection of news stories.

Newspaper	Picture	Space	Headline	Interest	Prominent Personality
Newspaper No. 2**	27.5%	12.5%	22.5%	27.5%	10%
Newspaper No. 3***	35%	15%	20%	20%	10%

**Newspaper No. 1 carries news only in text form.

***Newspaper No. 2 carries news with irrelevant images.

Table 5. Retention of second and third news stories.

Newspaper	Percentage of individuals who didn't remember 2 nd or both 2 nd and 3 rd news story
Newspaper No. 1*	57.5%
Newspaper No. 2**	32.5%
Newspaper No. 3***	25%

*Newspaper No. 1 carries news only in text form.

**Newspaper No. 2 carries news with irrelevant images.

***Newspaper No. 3 carries news with relevant images.

includes unrelated images to text, 32.5% individuals didn't remember second and third news stories. While in case of newspaper no. 3 only 25% didn't remember second and third news.

Table proves H5 that newspapers which include images (especially images related to text) have most amount of information retention of second and third news story read.

Table 6 shows that 62.5% individual's select first news story which have bigger image related to text in newspaper no. 2 (includes irrelevant images). While 70% individuals selected news with bigger size image in case of newspaper no. 3 (includes images related to text).

So H6 is proved that bigger the size of image greater the chances of its selection to be read first.

Conclusion

Now-a-days images are important part of print media journalism. Images have powerful and extended effects on our memory. Image also helps readers in selection of news story. Images and pictures are very effective tool to play up and play down the news stories because news which includes images are explored by more readers and it will build public opinion on that issue. This research also explored the effects of images on reader's retention and attention.

Images are also heavily used with features to make it more attractive. Profile pictures of personalities are used with interview feature. While other appealing images are used with human interest angle in them to make features seductive for readers.

So this research will help to understand the power if visuals and picture in print media. How they are effective in process of retention, recall and memory. This research explored specifically the retention of news story in readers mind and how photojournalism is important in selection of news stories.

In this research thesis researcher tried to find relationship between images which is independent variable and retention of news that is dependent variable. Researcher applied experimental method for research that is most suitable method for this research. Sample is selected by researcher by simple random technique with replacement from the population. Literature review done during this research also justified the findings of research. Research consists of six research questions. And six hypotheses were proposed by researcher. All six hypotheses were accepted during this research process.

The first research question which is related to the images effects on memory and retention that how much information is retained when there is images with news which are related to the text of news story. Researcher observed that maximum amount of

Table 6. Effect of image size on selection of 1st news to be read.

Newspaper	Percentage 1 st exposed news stories which include bigger size images
Newspaper No. 2**	62.50%
Newspaper No. 3***	70%

**Newspaper No. 2 carries news with irrelevant images.

***Newspaper No. 3 carries news with relevant images.

information is retained when there is accompanying photograph relevant to text of news story. While retention is less in case of irrelevant pictures and news which are purely text.

The second research question is stated as how do images unrelated to news story influence reader's retention? Findings show that news either relevant to text or irrelevant. Image becomes cause of selection of news story so instead of no relation between image and news story reader has chosen them.

Third research question is how much information is retained by the readers when the news is purely text? News which are purely text are selected very less by readers to consume that's why their retention is also minimum. Readers remember news with images either they are related or unrelated to text. But retention of information when news is purely text is least. This is also proved in **Table 3**.

Fourth research question is about how picture is important factor in selection of news story? Picture is most important factor in selection of news story. There are other factors which are also important like interest, space and prominent personalities but picture is most effective tool in selection of news story. Picture is appealing and attractive near readers so they chose news stories with images. This is also called selective exposure of news stories. Because readers only choose those news which are attractive near them.

Fifth research question is about retention of second and third

news story in all three types of newspapers. That how much information is retained in case of second and third news story? It is observed that in case of newspaper which include images either related or unrelated to text more the retention of second and third news story. While news which are purely text least amount of information is retained about second and third news story. Even in case of text only stories some individuals didn't remembered single detail about news story.

Sixth research question is about how size of image is related to the selection of news story? Researcher came to know that image size is very influential in selection of news story. If more space is given to the picture with any news story in newspaper then the more the chances of its selection. Bigger the size of image of news story greater the chances of selection of that news story to be read first. Image size also plays in selective exposure of news stories.

All the six hypotheses were tested positive suggesting that selective retention and selective exposure theories suits best for this study and play important role for the fulfillment of purpose of this study. It was observed that images have maximum amount of information retention while text have least amount of information retention. News which has unrelated images to the text have intermediate amount of information retention. Moreover an image is most important factor in exposure of news stories. Image size is significantly important factor in selection of news of story.

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