

# Photographers' Attitude towards Impact of Photo Manipulation in Various Photography Genres

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**Abstract:** *The presented study examined photographers' attitude and their acceptance level for unethical uses of photo manipulation in their respective photography genre. Author conducted a survey of 228 respondents to get the answer of research question: How demographic factors such as age, qualification, professional experience, occupation and genre of photography influence photographers' acceptance level of photo manipulation in their work. This paper enquired photographers' opinion on research question: Whether photo manipulation is responsible for the credibility loss of photography in public domain? The analysis suggested that photo manipulation is negative for credibility of genres like Photo journalism and commercial advertising whereas respondents didn't agreed on negative impact in case of fashion photography. It was concluded that with the growth of age, experience and reputation in profession, photographers were more likely to held photo manipulation responsible for credibility loss of photography. On the acceptance of photo manipulation, genres like fashion, commercial advertising photography were more tolerant than photo journalism or wildlife genres.*

**Index Terms:** *photo journalism, media ethics, photo manipulation, impact of Photoshop, photography, ethics of digital photo manipulation*

## I. INTRODUCTION

The photography and image editing industry has been witnessing unprecedented revolution for last two decade. Digital photo processing tools like Photoshop© have transformed photography by enabling photographers and digital artist to take their photographic outcome at new creative heights. Nowadays being good at photography is not only crucial but also being great at digitally processing is important too. Photographers and graphic designers use digital photo processing tools to give desired treatment on photograph for enhancing its impact on viewer. Some of these treatments can be put under ethically acceptable category like color correction, brightness- contrast, or adding sharpness. These treatments don't manipulate the original content of photograph and remain limited to aesthetic value addition processing only, but sometimes photographers cross the red line and manipulate their images to an extent that their original meaning is completely changed from what it was originally shot.

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These manipulations including change of background, adding elements or removing people in frame can be considered unethical according to photographic community. Photo manipulation is considered as a negative word in some photography genres like photo journalism, while its synonym "photo processing" has a positive connotation and seen as vital process in other photography genres like fashion, commercial advertising and landscape photography. The inclination towards digital imaging technology by media started around late 1970's. Fahmy (2005) asserted that the advent of digital revolution in photography and image processing enabled the photographers to manipulate without appearing to do so [4]. But, at the same time, digital intervention proved to be a double edged sword for photographers. This digital evolution lead to expose numerous cases of deceiving public by false interpretation of truth in last the two decades, which has resulted in diminishing credibility of photographers and documentary photography in public domain. (Huang, 2001). Digital image processing tools have made altering the photograph distinctly more candid, faster and undetectable (Ricchiardi, 2007:36) [17]. In other words, now it was more convenient to lie without the fear of getting caught. This notion has lured photographers into tempting trap of quick popularity. Buying unethical photo manipulation for creating quick and easy sensational photographic story telling proved too expensive for photographers that some photographers had to pay the price by losing their professional careers and all the photography industry witnessed depletion of faith among readers. Greer and Gosen (2002) concluded that public trust in media has deteriorated impulsively in 1990s. Winslow (2005) emphasized that newspapers and publications with high rapport like WPO, National Geographic had to intervene by imposing stricter ethical code and guidelines on their reporting and photo contests. Though, not all photographers use unethical photo manipulation in their profession, still they face consequences of photo manipulation in industry as it has raised viewers' expectations for visual delight from photography. Those who don't use digital image processing tools for post processing their images and rely only on their photographic skills, feel difficulty to face competition from heavy users of photo manipulation in garnering popularity and fanfare. There are few photographers who strictly follow the ethical code of conduct and there are others who believe that it is acceptable to use basic photo processing techniques (like cropping, adjusting brightness contrast etc.) unless it alters

the core meaning of image. The Code of Ethics of the Society of Professional Journalists stated that "image enhancement for technical clarity is always permissible" but a photographer or editor should "never distort the content of news photo or video[24]." (SPJ 1996). There is a thin and blurry line which distinguishes ethical conduct in photo manipulation among various genres. Identifying this line between unethical manipulation and ethical editing is not easy. (Mäenpää and Seppänen, 2010; Yao, 2016)

The presented study tries to identify this crossing line by enquiring photographer's acceptance level for photo manipulation in various photography genres[27]. Author has surveyed 230 Photo manipulation users and photographers from all major photography genres to enquire their opinion about impact of photo manipulation on credibility of photography. This study also enquired that how demographic factors such as age, qualification, occupation and professional experience influence photographers' attitude towards manipulation among these genres. What is the interrelation between photo manipulation and above said personality characteristic of its practitioners; is a major objective of this study.

#### Literature review

### II. THE NEED OF STUDY FROM PHOTO MANIPULATORS' PERSPECTIVE

Academic research is sparse on the subject of photo manipulation. Whatever little matter author could found was majorly focussed on photo journalistic point of view. Ethical enquiry of photo manipulation has been conducted through editors' and news photographers' perspective only. (Fosdick and Fahmy, 2007; Carlson, 2009; Mäenpää and Seppänen, 2010) [2][5]. There are few studies which explained photo manipulation issue by enquiring perception of photo editors, readers, and photo journalists. (Reaves, 1991, 1993, 1995b; Stephens et al., 2007) [18]. Fahmy (2005) stated that research on digital enhancement has been primarily focused on readers and editors' perception, but very few studies have enquired the opinion of photographers and digital professionals who actually do the manipulation. Fahmy and Johnson (2005) indicated to the need of study on photo manipulation which can investigate views of actual photo manipulators like graphic designers and photo editors. Hoffman (2008) found that "current research on image manipulation has identified a clear need for tools that can measure and explore image manipulation[9]."

### III. PHOTOGRAPHIC INTEGRITY AND ETHICAL ENQUIRY

Wehmeier (2005) referred to the "Oxford Dictionary" which explained "Integrity" to be the quality of being honest and having strong moral principles [32]. Gefter (2006) asserted that "Truth-telling is the promise of a photograph – as if fact 'itself resides in the optical precision[6]. A photograph comes as close as we get to witnessing an authentic moment with our own eyes while not actually being there." Fosdick (2007) conducted a study to enquire the ethical implications of default assumption of photographic truth[5]. This assumption says that readers assume of photograph has not been significantly altered. Here recommended a need for epistemic honesty in order to restore integrity. Journalism

scholars often refer to epistemic honesty in the voyage of truth. Epistemology is the study of the basis of knowledge which enquires how we come to know truth. Fosdick (2007) stated that "Truth as an ultimate ideal—and the concomitant issues of how journalists find, determine, establish, convey, and support it—is often seen as the prime directive of the field". Scholars agree that there is no such thing as absolutely true photograph. In that scenario, photo journalists' norm should not be truth. If the photographer is not able to offer truth, then he can at least pursue epistemic honesty because the reader of a photo has his right to expect "honesty". Fosdick (2007) even coined a definition for it: "Epistemic honesty is information added to help the receiver judge the truth or accuracy of a piece of communication. It involves the process of how we come to know what is honest." There are media ethics guidelines in place which help publications to navigate through possible pitfalls of unethical misdeeds. If there were no media ethics, media and photography would have lost their credibility in public perception long ago. Gladney and Ehrlich (1996) suggested that digital image manipulation should be added to the list of "ethical pitfalls" (p. 506) [7]. The core element of ethics is honesty; if truth is not always available, then media ethics should rely upon honesty. (Herrscher, 2002)

Thompson (2006) argued that photo journalism ethics has at its core the truth-telling. Mäenpää (2014) also linked photojournalism ethics to the value of objectivity, which is often synonymous with credibility (in context of photo journalism) and evidential value of news images. Ethics become especially crucial in the case of documentary photography. Williams et al (2011) argued that photo journalists have a separate identity from other professionals like editors in news room, who are not much trained in journalistic values and are therefore not justified in making journalistic decisions[33]. Wheeler (1995) termed photography as inherent manipulation- a manipulation of light[30]. According to him, photography process involves many stages, which are prone to biases and interpretations of the photographer, printer, editor, or viewer. Newton (2013) asserted that visual truth is interplay between the observed and the observer: photo subject, the photographer, the editor and the viewer who sees the photo[14]. Newton proposed that photojournalism should be considered both an art and exemplification of truth. Being an observer releases the photographer from burden of absolute objectivity. Thus, a photo journalist becomes an interpreter and every image an informed interpretation. (Newton, 2013)

### IV. THE ISSUE OF CREDIBILITY DEPLETION

The major question in literature is still under wraps that where does enhancement end and deception begin? Fahmy (2005) challenged the debate on photo manipulation by throwing this

question: Where to draw the red line? He asserted "Future studies should focus not only on news professionals and news photographs, but also on other types of photography, where digital manipulation is controversial, especially wildlife and natural history photography". He observed that

the literature on photo manipulation has agreement on the definition of unethical manipulation. The definition says: "If the photograph is manipulated differently from what it was originally seen in camera's viewfinder which violates the public trust, then it will be an unethically altered." (Gladney & Erlich, 1996; Wheeler & Gleason, 1995). Pew Research centre for the people and the Press (1999) concluded in their survey that depletion of credibility in public was most important issue faced by media. Ritchin (1991) stated that photo journalists jeopardize their credibility with each case of photo manipulation: "While readers have always accepted that text is re-written and sometimes edited with a point of view, they have relied on photographs to represent the truth" [23]. The growing temptation of sophisticated digital image processing techniques and growth of digital intervention in image making lead photographers to buy unethical practices of photo manipulation, which proved expensive for photographers. Carlson (2009) stated that publication of unethical photo manipulation remains a major reason for photo journalists losing their jobs and these cases studies of manipulated photos are widely debated by scholars in journalism. Winslow (2005) emphasized that "ever increasing cases of deception by photographers in submitting entries to photo contests started jeopardising integrity of publications with high rapport like Sony WPO, National Geographic etc [31]. To restore their lost credibility, they had to intervene by imposing stricter code and guidelines in submission and reporting." Many photo contests started demanding for the RAW file format from participants at the time of photograph entry submission because RAW file is the most primitive and authentic version of image data in a photograph. They usually rely on RAW format because it does not have any scope for digital alteration. Winslow (2009) referred to a Danish photographer who challenged this notion of RAW file when he was disqualified from a photography contest and was asked to submit the RAW file. The photographer stated: "*In my opinion, a RAW file has nothing to do with reality, and I do not think you can judge the finished images and the use of Photoshop by looking at the RAW file.*" (Danish photojournalist Klavs Bo Christensen, April 13, 2009) This argument indicates that some photographers justify the use of digital manipulation as a part of their creative methodology and final image product as an aesthetic impression of their creative thought process unless they are not ruining the core matter of a photograph which has some journalistic value. This justification blurs the red line of ethical conduct and most photo manipulation cases are the product of this delusion. Greer (2002) stated that increase in cases of photo manipulation has led to depletion in credibility of photography [8]. Ingledew (2005) raised the question "Photography as a factual language is in danger of being undermined by the ease of doing digital manipulation. Digital photography may devalue its credibility in public perception. Will the image be trusted anymore?" Today, scholars are unanimously agreed upon credibility of photography (photo journalism) is in flux. Lester (1999) warned that digital manipulation can be the greatest threat to the credibility of photo journalism. In a later study, Lester (2006) concluded that "credibility is a precious commodity that should be protected with as much fervour as can be mustered".

Three schools of thoughts are debated on the topic of photo manipulation by researchers since 1980. One thought asserts that a published image can be indistinguishable to the original without using any photo manipulation. Second thought argues that any digital alteration should be applied to whole image, not to specific pixels. (Kobré 2004, 331–332). Remaining scholars believe that photo processing techniques such as: cropping irreverent elements, correcting color balance, dodging and burning which do not manipulate the integrity of original image can be categorised as ethically acceptable. (D. Elliott and Elliott 2003 [3]. 12) Qingjiang (2016) proposed that "meaning communicated by a picture and public's expectations of the veridicality and verisimilitude of news pictures are matter. So digital alteration is acceptable as long as it does not change the public understanding of the reality portrayed in the photo" Oriez (2009) did useful study on readers' acceptance of photo manipulation techniques in news photography [15]. He discovered that how much viewers trust newspaper images and manipulation to truthfully depict the scene photograph. He proved that adding or removing people is not acceptable to newspaper readers. Though "Burning and Dodging" technique has been found acceptable to photographer in similar studies; however there have been cases when it has crossed the ethical line (Siegel 2003). In a similar study, Thompson (2006) found that practices of "Digitally altering depth of field" and "Removing distracting element" were not acceptable to his respondents who were from photo journalism background [25] [26].

## V. FACTORS INFLUENCING ATTITUDE ON PHOTO MANIPULATION

It was suggested in research that public attitude toward media credibility is influenced by demographic characteristics of readers like age, education, socioeconomic standing etc. Nearly twenty five years ago, Reaves (1992/1993) conducted studies to find photo editors' and public attitude on digitally altered photographs [19]. Thompson (2006) studied the photo journalists' attitude on photo manipulation ethics and asserted that this issue is no less pertinent today than it was for Reaves. On the question on importance of photographic veracity, Wheeler (2002) answered that "readers have qualified expectation of reality (QER) when they encounter photograph. Truthfulness is one of those expectations when reader experiences a news photograph but same is not expected from a Hollywood movie." Greer and Gosen (2002) have referred to the survey conducted by The Associated Press in 1997 for their study to assess levels of digital alteration in public perception of news media credibility. This survey found that people over age 65 believe 67% of news they read. Believing factor was 74% of younger people under age 30 years. West (1994) concluded that higher education level was factor behind lack of trust in media by public. People with higher socioeconomic status are more likely to trust newspaper



then television. Weaver and Wilhoit (1996) did not find any trend to make a strong opinion on whether gender plays any role in manipulation judgements. Though, Pritchard (1993) observed that male editors were more prone to accept manipulation practices [16]. Mäenpää (2014) asserted that photojournalists depend on factors such as: their education, professional skills and ethical codes when they defend their decisions regarding photo manipulation. Taking personal characteristics into consideration, Reaves (1992) established that editors' attitude toward manipulation is impacted by factors like journalism experience, education and age [20]. Sheila Reaves conducted a series of studies on journalists' attitude towards manipulation. Her studies are one of the most cited in finding that where editors, photographers and readers draw the line. She concluded that editors made a clear distinction of different levels in manipulation. The influence of other organizational characteristics is quite relevant to this study. Weaver and Wilhoit, (1996) found that the size of the media organization and the type of organizational edifice influence photo journalist's ethical judgments [28]. Lowrey (2003) also asserted that the larger size of organization is more likely to have rules to control manipulation, but they are more prone to be at the risk of manipulating photographs. According to his conclusion, there is more potential for manipulation and processing when it comes to creative interpretation of photographs. He argued that aesthetical purposes are more likely to create ground for photographs to be processed compared to journalistic value. The hypothesis given by him stated: "The stronger the orientations of design staff towards journalistic professional norms, the greater the likelihood of the existence of rules governing the photo." (Lowrey, p. 132, 2003). Gladney and Ehrlich (1996) conducted a study about cross media comparison of the ethical responses of newspaper photo editors and TV news directors. Photo editors were agreed that sophisticated photo processing techniques increases the temptation to manipulate photo. Research also found that increasing levels of photo manipulation techniques led to lower levels of credibility for photo journalism and higher income individuals viewed photographs as less real and the media as less credible. Credibility of media and photography is less in higher income group. The question of having a universal guideline which can check manipulation globally is still debated. Huang (2001) asserted that "To date, no industry wide standards have been accepted regarding what level of photo manipulation ethics and practices are acceptable" [10]. Campbell (2014) reinforced him in his report by stating, "prior to 2014 no one had researched whether or not there are accepted industry standards about what alterations (if any) media organisations around the world permit" [1]. In 2014, World Press Photo commissioned David Campbell to enquire contemporary practices and accepted standards of photo manipulation. This report provided most relevant observations of photo manipulation trends among documentary photographers. According to WPO report (2014), new guidelines were the product of five month review of their activities and lessons learned from the previous photo contest.

### VI. METHODOLOGY

In the presented study, author wanted to enquire photographers' opinion on impact of photo manipulation on

credibility of photography. The study design is inspired by available relevant literature on photographers' characteristics and their impact on photo manipulation. Following research questions were designed:

**RQ 1:** What is the impact of photo manipulation on the credibility of various photography genres?

**RQ 2:** How demographic factors like (age, professional experience, occupation, qualification and photography genre) influence photographers' attitude towards impact of photo manipulation in various photography genres.

The questionnaires were designed after thorough review of relevant studies in similar domain. The questionnaires were sent to 495 professionals from following categories –

- (1) Wild life photographers
- (2) Creative Photographers
- (3) Landscape Photographers
- (4) Fashion photographers
- (5) Photography and Graphic Design Students
- (6). Photo journalists
- (7) Graphic designers
- (8) Academicians and Researchers
- (9) Photography enthusiast

To attain an unbiased conclusion, the sample population was consisted of all stake holders from photo manipulation practices which included photographers from various genres and digital artists who actually use photo manipulation in their professional life. Surveys in form of Google forms were sent to 495 professionals in photography & design field. Out of them, only 228 respondents replied in 2.5 months period from mid Oct 2017 to Dec 2017. There is one common thing amongst all respondents that they all use Adobe Photoshop®

for photo manipulation. The opinion of India's 45 well known photographers has shaped this survey conclusion. The database related to photographers was collected from popular photography website 121clicks.com. The answer rate in this research survey is 46% (228 respondents replied out of 495 mail survey sent) which is a feasible response rate to generate results.

### VII. QUESTIONNAIRE DESIGNING

Research questions were designed to enquire impact of photo manipulation on credibility of various photography genres. The questionnaire asked respondents their personal details like their age, occupation, professional experience photography genre and then their opinion on impact of Photoshop. Further, in next part of questionnaire, there was a photograph test which asked respondents their opinion about photo manipulation's impact on credibility of various photography genres like- Photo journalism, Commercial advertising, Wildlife, Fashion, and Landscape. They were shown manipulated photographs from these genres along with their original versions. There was a clear tag of "Original" and Manipulated version" to make them aware about difference in both images. The respondents were asked that "Whether manipulation in the displayed photograph is negative for the credibility of its respective genre photography". A five point scale recorded the

response from “Strongly Disagree to Strongly Agree.

## VIII.RESULTS

### A. Respondent’s Demographics and Characteristics:

A total of 228 respondents took part in web based survey. As depicted in figure 1 (A), the age group distribution of respondents comprised as: 40% population from 18-25 years, 37% from 25-35 years, 21% from 36-50 years age group and only 3% from 50 years above. This demographic structure is clearly inclined towards younger age group. The majority of young people suggested that young photographers are more likely to influence photo manipulation decisions in photography. The second question (Figure 1(B)) asked about respondents’ highest qualification. The study revealed that nearly half of respondents have a graduate degree (53% graduates) where 37% were post graduate. A small number (10%) were PhD degree holders. Third question enquired about respondent’s occupation in media industry. Figure 1 (C) depicts that 15.4% respondents were professional photographers, 20% respondents were media academicians, 31% graphic designers and digital artist. Students consisted 25% in this group while amateur photographers stood at 7%. Only 3.5% respondents were photo journalists who have the most serious role to play in photography. Enquiring about their photography genres, results revealed that 5% respondents were from wild life genre, 55% were amateur photographers, 6% were photo journalists, landscape photographers were 10% and fashion photographers stood at 15%. Commercial advertising photographers were 11% of respondents group. (Figure 1(D)). When enquired about their professional experience, 32% were fresher, 26% were having 2-5 years of experience, and 20% were from “5-10 years” bracket of experience. Rest 20% were from other senior category of “10-20 years” bracket while only 5% were from most senior group of photographers in India (More than 20-40 years of experience). (Figure 1(E)). In figure 1(F), 92% respondents accepted that Photoshop© has improved the quality standard of photography. Only 8% deny role of Photoshop in increasing photography quality standards today. As shown in figure 1(G), 75% respondent’s perception was positive about the impact of photo manipulation in their profession, where only 25% considered it negative. When asked about their likeliness for learning newer techniques of photo manipulation that will visually enhance their photography results, 85% respondents said “Yes” where 15% were not willing for it. (Figure 1(H)). Finally, 10% respondents were ready to earn their reputation as a photographer who practices unethical manipulation techniques, while majority(64%) was not ready to risk their credibility as a photographer. Remaining 26% respondents were not sure about their response in this situation.

### B. Impact of photo manipulation on the credibility of photography genres (Photograph test)

For answering RQ 1, a photograph test was designed to enquire respondents about their opinion towards impact of photo manipulation on the credibility of different photography genres including: Photo journalism,

Commercial advertising, Wildlife, Fashion, and Landscape. As mentioned in literature review, many scholars have established correlation between photographers’ demographic factors and their acceptance on photo manipulation: Lowrey (2003) Mäenpää(2014) and Reaves (1992)[11][12]. This test’s results were analysed to find correlation between demographic factors and dependent variables like various photography genre to elicit their attitude towards manipulation.

In the test, first question was asked about impact of photo manipulation on the credibility of photo journalism. (Figure 2 (A)) In the response, 113 out of total 224 respondents (50 %) were strongly agree with the statement that photo manipulation is negative for credibility of photo journalism. where 40 respondents (17.8% ) were agree. 36 respondents(16.5%) chose to remain neutral and 21 respondents (9.3%) were strongly disagree. The mean response was 3.89, corresponding to “agree”. When seeking correlation between variables: age and photo journalism, Pearson correlation (r value) was .200 and significance value was .003, which means that age and photo journalism were positively correlated at a significant level. Correlation between qualification and photo journalism was not found, (r value .106, sig value .116). Similarly variables like Genre (r value .002, Sig value .976) and occupation (r value -.087, sig value .191) were not found correlated significantly. Experience was found positively correlated with photo journalism at significant level (r value .213, sig value .001) which means more experienced respondents agreed that photo manipulation is negative for photo journalism credibility. (See Appendix: Table 1-2)

In second question (Figure 2 (B)) which was about impact of manipulation in commercial advertising, 30 respondents (13.4%) strongly disagreed to it, 36 (16%) respondents were disagree. 47 respondents (21%) gave neutral response to it. 55 respondents (24.6%) were agree and 55 respondents chose to be strongly agree.

The mean response was at 3.25 which reflect lukewarmly agreeing response about negative impact of manipulation in advertising. The Pearson correlation analysis of advertising genre indicated that age and experience (r value -.156, sig value .019) were negatively correlated with advertising genre at significant level. Next variables “Qualification” (r value .017, sig value .797), “Genre” (r value .161, sig value .015) and Occupation (r value .117, sig value .080) were not found correlated at significant level. (See Appendix: Table 1-2) As depicted in Figure 2 (C), the third question was about impact of photo manipulation on the credibility of wild life photography genre. In the response, 50 respondents (22%) were strongly disagree with the statement, while 40 respondents (17.8% ) were disagree. 32 respondents(14.2%) chose to remain neutral. 52 respondents (23%) were agree and 50 respondents (22.2%) were strongly agree to this statement. The mean response was 3.01 which reflect neutral opinion on photo manipulation’s impact on credibility in wild life photography. Correlation analysis suggested that no demographic variable is correlated with wild life genre. The fourth question,

(Figure 2 (D)) which was about fashion photography, 56-56 respondents (24.8%) chose strongly disagree and disagree option, and 53 respondents (23.7%) gave neutral response to it. 32 respondents (14.3%) were agree and 28 respondents (12.4%) chose strongly agree response. The mean score was 2.62 for fashion photography genre which indicates that photo manipulation is acceptable in fashion photography and have no negative impact on credibility. When analysing correlation of photographers' demographic factors with fashion photography, they were found negatively correlated with it at significant value (Age: r value -.145, sig value .031, Qualification: r value -.135, sig value .044, Experience r value -.150, sig value .024). (See Appendix: Table 1-2) Further analysis shows that Photography genre was positively correlated (r value .142, sig value .032) and occupation was not correlated at significant level with fashion photography genre. The fifth question (Figure 3(A)) was about landscape photography genre. Here, 30 respondents (13.3%) were strongly disagree, 42 respondents (18.6%) were disagree. 45 respondents (19.8%) chose to remain neutral. 58 respondents (25.7%) were agree and 51 respondents (22.6%) were strongly agree to this statement. Mean value of responses was 3.23 which indicate that respondents were almost neutral about negative impact of photo manipulation on credibility of landscape photography. In Pearson correlation analysis, no demographic variables were found correlated with at significant level. (Appendix: Table 1-2)

### IX. DISCUSSION

First objective of this study was to find impact of photo manipulation in various photography genres. Results suggested that majority of respondents agreed that digital manipulation (referring to Photoshop©) has a positive impact on their respective genre of photography and profession. All respondents accepted that Photoshop© has improved quality standard of photography. Though Photo manipulation was considered as a negative term for photographer's reputation so majority of them didn't wanted to risk their reputation by using unethical photo manipulation techniques but at the same time they were ready to learn newer Photoshop techniques.

Another aspect of this study was to enquire photographers' opinion about impact of photo manipulation on credibility of various photography genres. Analysis suggested that photo manipulation was negative for credibility of genres like photo journalism and commercial advertising. Respondents' opinion was neutral when asked about photo manipulation's impact on credibility of genres like wild life and landscape photography. The result suggested that photography community is dispassionate about impact of photo manipulation in both of these genres when compared to more sensitive genre like photo journalism. The reason behind similar results in both genres might be that they are closely related and sometimes overlapping in their subject nature which makes photographers think about them as identical. Further, respondents were disagreed on negative impact of manipulation in the case of fashion photography genre's credibility. This outcome can be anticipated as photo processing is considered as an integral aspect of this genre. These results are in coherence with previous studies which suggested that photo manipulation is purely subjective matter and its impact depends on the

presentational context. (Martin 1991; Reaves 1995)[21][22].

Second objective of this study was to enquire "how photographers' demographic characteristics influence their acceptance level of photo manipulation in various photography genres[13]. Correlation analysis suggested that with increasing age and experience, photo manipulation is considered negative for the credibility of photo journalism genre. In case of commercial advertising photography, analysis indicated that with growth in age and experience, respondents disagreed that photo manipulation is negative for credibility of commercial photography. This result is in coherence with opinion of experienced commercial photographers and recent studies on same topic. No correlation was found in demographic variables and independent variables of this study in cases of wildlife and landscape photography genres. It can be said that characteristics like age, qualification, occupation and experience don't influence respondents' opinion on impact of photo manipulation in both of these genres.

Here a limitation of this study which should be noted: As comparatively less number of respondents represented wild life and landscape genre in presented study, so it is recommend to expand this study by taking more number of respondents from these two genres,. The results in fashion photography indicated that respondents with older age, higher

qualification and more experience were disagreeing that photo manipulation is negative for fashion photography. Photo manipulation is always welcome when it comes to fashion genre.

### X. CONCLUSION

It can be concluded that overall impact of digital photo manipulation is considered positive for photography by photographers' community. This conclusion differs from previous studies which have found photo manipulation a negative tool as those studies were conducted from the perspective of readers, editors and photo journalists. The presented study has exclusively enquired photographers from various professional photography genres and actual photo manipulation practitioners; hence acceptance of photo manipulation in their profession on a positive notion can be understood. Further, unethical photo manipulation practices are seen in negative light for credibility of photography, particularly in the case of documentary photography. Examining impact of photo manipulation on base of photography genres, it was observed that this is highly subjective issue and its impact depends on the application of techniques in various genres. This result is analogous to the report of the WPPA, which concluded that manipulation is widely deemed to be unacceptable for photo journalism (Campbell 2014). The photographers' attitude towards manipulation depends on their personality characteristics. The debate is still alive in photographer's community that what is justified for fashion, cannot be accepted in photo journalism. No universal guideline can be drawn which can separate ethical and unethical conduct in photo manipulation. All these photography genres have



their own professional standards and requisites which cater to their own set of audience, so manipulation amount is determined by consumer's demand, but a minimum level of ethical conduct is required to maintain integrity of image otherwise photographers have to be ready to face credibility loss for photography in public opinion. This research again reinforce the WPPA report (2014) which concluded that photographers make their photo manipulation decisions on case by case basis, and there would never be a fine line which can clearly demark unethical photo manipulation practices as a common guideline which can be applied for all photography situations.

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Figure 1: Respondent's demographics and characteristics



Figure 2: Photograph test

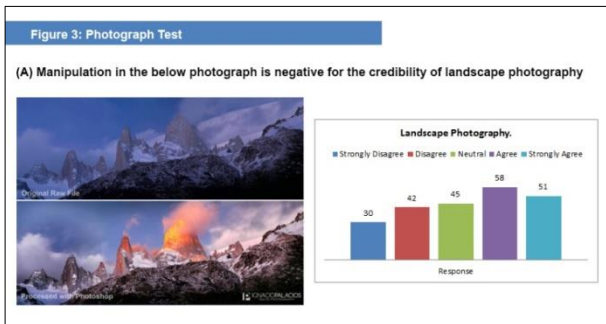
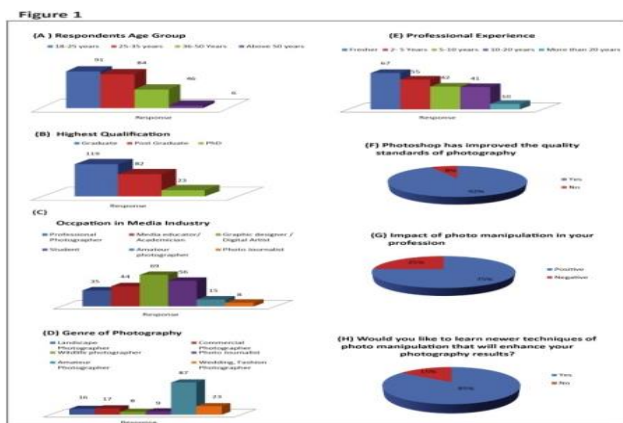


Figure 3: Photograph test



Appendix:

Table 1: Photographers' response on negative impact of photo manipulation on credibility of various genres

Genre and demographic factors	Mean	Std. Deviation	N
Photojournalism	3.89	1.394	227
Advertising	3.25	1.415	227
Wildlife	3.01	1.515	227
Fashion	2.62	1.346	227
Landscape	3.23	1.380	227
Age	1.82	.819	222
Qualification	1.57	.673	223
Genre	4.62	1.833	227
Occupation I	3.41	1.785	226
Experience	2.34	1.230	226

Table 2: Correlations between photographers' demographic factors and their attitude towards photo manipulation in various photography genres



		Age	Qualification	Genre	Occupation1	Experience
<b>Photo journalism</b>	Pearson Correlation	.200**	0.106	0.002	-0.087	.213**
	Sig. (2-tailed)	0.003	0.116	0.976	0.191	0.001
	N	222	223	227	226	226
<b>Advertising</b>	Pearson Correlation	-.173**	0.017	.161*	0.117	-.156*
	Sig. (2-tailed)	0.01	0.797	0.015	0.08	0.019
	N	222	223	227	226	226
<b>Wildlife</b>	Pearson Correlation	0.099	0.061	0.045	0.008	0.04
	Sig. (2-tailed)	0.142	0.368	0.502	0.91	0.552
	N	222	223	227	226	226
<b>Fashion</b>	Pearson Correlation	-.145*	-.135*	.142*	0.108	-.150*
	Sig. (2-tailed)	0.031	0.044	0.032	0.106	0.024
	N	222	223	227	226	226
<b>Landscape</b>	Pearson Correlation	0.035	0.034	0.055	0.051	0.034
	Sig. (2-tailed)	0.609	0.609	0.406	0.447	0.606
	N	222	223	227	226	226

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

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