TITLE: The Future of Professional Photojournalism: Perceptions of Risk

By Adrian Hadland, David Campbell and Paul Lambert

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ABSTRACT

The work practices of the professional photojournalist are currently undergoing rapid change in the digital era. New technologies, new platforms and new methods of visual storytelling are exerting a range of pressures and influences that require photojournalists to adapt and respond in different ways. The changes provoke a number of questions that are critical to the future of professional photojournalism: What are the new risks being faced by photojournalists? How are the transformations in the media economy affecting photojournalists' employment? What does this mean for image quality? How do photojournalists think about the manipulation of images or the staging of events? Given the rise of citizen journalism, digital technology and social media, will there even be professional photojournalists in the future?

This paper presents some of the results and new analysis from the first international study into the current state and future of professional photojournalism, with a specific focus on risk and on perceptions of risk among photographers. The results indicate a high degree of risk is experienced among professional photographers with a very strong correlation to the country in which they are based. The research analyses data taken from 1,500 professional photojournalists from more than 100 countries and is a partnership between the University of Oxford's Reuters Institute for the Study of Journalism, the University of Stirling's journalism department and the World Press Photo Foundation, one of the premier platforms for the recognition of global excellence in photo- and video-journalism.

KEY WORDS: Photojournalism, risk, change, digital, employment, photography, country

1. Introduction

While the image is a central and vital component in modern communications, the place of the professional photographer has never been as potentially under threat as it is in the digital era. Even relative to the falling number of journalists in full-time employment over the past two decades, photographers have lost their jobs in disproportionate numbers particularly in America (Mortensen 2014, Anderson 2013). On occasion, entire photographic departments have been shed or drastically reduced, most infamously at the *Chicago Sun Tribune* and at *Sports Illustrated*. US career surveys have even named photojournalism among the ten worst jobs (Romenesko, 2015)

The challenge to professional news photography, however, goes far beyond job security, and is both multi-faceted and complex. The digital revolution has witnessed the transformation of the audience into producers and with technology growing in power and shrinking in cost, a new generation of amateur and citizen image-makers has emerged. Every contemporary disaster, natural or self-inflicted, has been captured by people on the scene with cameras or mobile phones. Nor are these new content creators satisfied only to take images. They transmit them, edit them, mash them, mix them with other media and take enjoyment out of the boundless creativity and appeal the technology now offers.

But it is not only the emergence of visual media as a mass phenomenon that impacts on the future of the professional news photographer, nor is it changing work patterns or even ethical challenges. Professional photography, as this article confirms, is also an extremely risky occupation and is getting riskier.

This research clearly demonstrates that risk of physical harm or death is felt deeply across the genders and across age groups with most photographers believing that it will increase over time. Less than one in ten photographers surveyed say they are 'never' exposed to risk at work, while a very substantial 92% say they are exposed to physical risk at some point. This is one of the digital era's more alarming trends, with important implications for the sustainability of photojournalism¹ as a profession.

Drawing on data from the first major international study into the current state and future of professional photojournalism,² this paper focuses specifically on the risks faced by professional news photographers in this digital 21st Century.

2. Literature Review

News Photographers are an understudied group of creative practitioners. Some would claim this replicates the systemic under-valuing of photographers and their work in traditional print organisations through, for instance, the common omission of bylines. Even in fairly recent work on the media industry and on the creative industries, it is rare that photographers are the principal concern. In Tunstall's *Media Occupations and Professions* (2001), photography merits only passing mention in the introduction's discussion of media occupation "fragments" (p.16). This absence is replicated in many other important other works analysing the sector, including Deuze (2007), Hartley (2005), and Hesmondhalgh (2013).

As a relatively small group with not much economic clout, photographers tend to be added in to research that looks at larger clusters of workers or sectors of which the media form a part,

¹ Photographers describe themselves in a range of different ways from photojournalists to visual storytellers and while there many kinds of photographers and a wide range of photographic work, equipment and endeavour, our principle focus is on news photography and, in particular, on photojournalism and documentary photography.

² See Hadland, A., Campbell D. & Lambert, P. (2015) 'The State of News Photography: The Lives and Livelihoods of Photojournalists in the Digital Age. Research Report. Oxford: Reuters Institute for the Study of Journalism. Available in September 2015 at: http://reutersinstitute.politics.ox.ac.uk/page/publications

such as the creative industries. In this area, a large number of scholars (Gill 2014; Ross 2009, Gill & Pratt 2008, Randle & Culkin 2009, Neilson, & Rossiter 2005, Butler 2004, Florida 2002) have noted not just more versatile work arrangements among creative producers such as casualisation and zero hour contracts but also a rise in stress, insecurity, ill-health and what they call "precarity", or the precariousness of life in the digital age.

Alternatively, photographers are included in studies of journalists. Beyond work commissioned by the World Press Photo Foundation (see, especially, Campbell 2014, 2013, 2010) we could find only a handful of research studies specifically on professional news photojournalists as a group (Mortensen, 2014; Caple, 2013; Papadopolous & Pantti, 2011, Pantti & Bakker, 2009; Taylor, 2000). Often this research looked at other groups too, such as amateur or citizen photographers (see, for instance, Allan 2015).

Mäenpää's (2014) is one of the few pieces of research dedicated specifically to photojournalists. It looks at the professional values guiding photojournalists and, in particular, examines the relationship between these values and the three activities of digital photo editing, the production of online news videos and amateur photography.

As useful as it is, Mäenpää's work is based on Finnish data obtained from 20 interviews and an online survey of 200 people associated with the photography industry including graphic designers and art directors. More systematic but still country specific is Vauclare and Debeauvais (2015), a French language study of French photographers conducted recently by the Ministry of Culture and Communication (for a summary and analysis, see Sutton 2015).

This paper applies new statistical analysis to what we believe to be the first, large-scale international survey that aims to track over time the circumstances of professional photojournalists and examine the impact of the digital era on their lives and livelihoods.

3. Methodology

We gained access to a representative sample of photographers through collaboration with the World Press Photo Foundation (WPPh), host of a leading international photography competition. In 2015, 5,158 photographers from more than 100 countries sent in their work to be judged across a variety of categories. It is this group which was tapped for the data that underpins this article. All entrants to the 2015 contest were invited to participate anonymously and confidentially, and 1,556 answered in excess of 60 questions, some with multiple options or with the opportunity to explain their answers in more detail.

The questionnaire was piloted with the assistance of the Reuters news agency in London in January 2015 and the final questionnaire was distributed on Monday 2 February by WPPh. All potential respondents were informed that participating in the study did not have any bearing on their chances for an award. Entrants were approached by email and asked to link voluntarily to the online, anonymous questionnaire. The link and questionnaire were closed on Sunday 15 February 2015. A total of 1,556 questionnaires were completed during this time, representing a high response rate (for online surveys) in excess of 25%. About half of those who filled in the survey were living in Europe with about a quarter in Asia (including Oceana and the Middle East), 11% in South and Central America and the Caribbean and just under 10% in North America.

3.1 Analytical methods

In our analysis we have used descriptive statistical techniques that are designed to summarise patterns of difference in one measured variable and how they are related to those in one or more other variable. Cross-tabulations in particular are frequently used which indicate the percentage of respondents who fell into a certain category, typically split according to another factor. Across

the range of survey questions we used cross-tabulations and other similar bivariate techniques to systematically review the extent to which responses on each question varied by the gender, age, continent of residence, employment status of respondents. Additionally, we reviewed many other patterns of association in response to *ad hoc* evidence or specific research questions, such as in the relationship between employment arrangements and income from photography, and attitudes about the future of or risks related to photography. In many instances, we summarise the patterns of association in relevant cross-tabulations by quoting 'association statistics' such as the 'Cramers V' and 'Gamma' values for particular tables of data.

These values, also often called 'correlations', all have similar qualities in that their magnitude ranges from 0 to 1, where a value of 0 indicates no association at all between the two measures, and a value of 1 indicates a perfect correlation or association (i.e. knowing the value of one variable would automatically tell us the value of the other). In survey datasets, association statistics most commonly have a magnitude in the range from 0 to 0.4, and the larger the magnitude, the stronger the pattern of association.

Some additional techniques of analysis, such as using regression models to explore the joint relative effects of several different 'explanatory' variables upon a specific 'outcome' variable of interest, were used and are elaborated upon at the relevant point. The statistical techniques of analysis used throughout follow common conventions and routinely used techniques of analysis. A popular methodological text that covers most techniques mentioned from the point of view of attitudinal survey research is Blaikie (2003).

It is worth noting that as detailed as the survey instrument was, some aspects of photographers' working lives, such as the diversity of their practices even within the broad ambit of news photography, was not possible. This article is intended to present a broad overview. Much of the analysis explores the breakdown of influences on reporting risks - the descriptive statistics and regression models try to summarise the relative influence of different sorts of differences between photographers upon answers to the questions on risks.

4. Results and Analysis

Most of the 1,556 photographers surveyed in this research face a number of significant risks in their daily work, often physical in nature but also risk to their financial stability and job security. These risks are expected to worsen in the years ahead, according to a majority of our respondents.

The things that worry photographers the most, according to our survey, are risk of injury or death, erratic income, failure to provide for families and a decreasing demand for work. These are illustrated, broken down by gender in the following figure:

Figure 1: What worries photographers most (see figures and tables at end of article)

The figure indicates that financial risks faced by photojournalists are felt keenly by the group who participated in this study. This is reflective of the "precarity" of creative work in the digital era and the challenges of securing a reliable income over time. In addition to the financial (and other) risks of photojournalism in the 21st century, and indeed outranking the financial concerns as the most popular choice by this sample, however, is the issue of physical risk.

The questionnaire contained five questions directly related to risks experienced during photography. These ranged from questions concerning different kinds of risks experienced in the present to questions about risks in the future. Only 8.5% of respondents said that they 'never'

faced physical risks at work, whilst 62.1% reported that they 'sometimes' faced risks, and 29.4% of respondents said that they faced physical risks 'about half the time', 'often' or 'always'.

There were 132 respondents in the sample who said that they 'never faced physical risks' in their photography. These respondents were somewhat more likely to be working in Europe, and were somewhat more likely to be female, but they were spread across a wide range of locations and circumstances. Photographers who mentioned commercial, portrait and 'other' photography as their main activity were slightly more likely to report that they never faced risks, and those who mentioned doing sport, and particularly so news, were less likely to report never facing risks - but all categories of photography featured people who reported a range of answers to the questions on risk.

Some 618 respondents (or 39.7% of all respondents), mentioned that the 'risk of injury or death' was one of the three things that cause them the most worry in their work as a photographer.

Figure 2: Relationship between physical risk faced at work correlated with future expectations

Figure 2 depicts the relationship between questions 53 and 54. The size of the markers is proportional to the number of respondents in each combination of categories. For example, those in the top left of the graph are those who do not anticipate worsening physical risks in the future and who do not report a high level of physical risk in their own work; those in the top right do not report a high level of physical risk, but are more concerned about risks increasing in the future; and those in the lower half of the graph represent respondents who report higher levels of risk, a great many of whom also think that risks will increase in the future. The bulk (but not all) of those respondents in the lower half of Figure 2 also mentioned (in questions 55-7) that one of the things that most worried them was the 'risk of injury or death'. At the same time, a moderate number of people from the upper left and right quadrants of Figure 2 also reported (in questions 55-7) that this risk was one of the things about which they were most worried (i.e. some respondents were worried about the risk of physical injury or death, but did not actually report currently being exposed to this risk, and/or did not anticipate these risks increasing over time).

Disregarding country-to-country variations, across the sample of respondents there was surprisingly little relationship between other measured individual characteristics, and self-reported attitudes to risk. Table 1 summarises the bivariate correlations between three indicator measures of risk (whether or not respondents say they face physical risks in their work 'about half the time', 'often' or 'always'; whether or not respondents believe that risks will 'increase a little' or 'increase a lot'; and whether or not respondents mention 'risk of physical injury or death' as one of the factors that most concerns them). The figures shown are the correlation statistic, and an indicator of whether the correlation value is estimated to be statistically significant.

Table 1: Correlations between three measures of risk

None of the variables examined show what would be described as a 'strong' correlation to attitudes to risk. There are weak associations between gender and age (the pattern, not shown in the Table, is that younger photographers, and male photographers, report greater experience of or concern about risk). There is a slight pattern of association between self-employment and physical risk (the relationship is that those who are self-employed report relatively lower levels of physical risk and anxiety about risk). The strongest relationship in the data involves the area of photography that respondents mainly work in – there is a modest association whereby people who

mainly work in news tend to report higher levels of risk, or concern about physical risks, than those who don't.

However, an important statistical consideration concerns the extent to which variations from country to country are taken account in such analysis. The survey features responses from photographers who are living or working in 116 different countries and/or territories and it is very plausible that experience of, and attitudes towards, physical risks may vary considerably from country to country. Figure 3 below summarises risk responses by continent of usual residence and gender. In fact, there is also evidence (see further below) that fine-grained country-to-country differences also explain considerable patterns of variation in risk patterns. Accordingly it is relatively less compelling to summarise the relationship between attitudes or experiences of risk and other individual level characteristics (e.g. gender, age) without controlling for country-to-country variations. Equally it is relatively less compelling to summarise country-to-country variations in risk without in some way controlling for individual level differences between photographers (e.g. of gender, educational level) that might be related to countries.

Figure 3: Perceptions of risk by continent lived-in

Therefore, to explore influences upon concerns about physical risk in a more nuanced way, statistical modelling was conducted in order to summarise how other measured features were, on average, related to concerns about physical risk. A logistic regression was conducted to assess influences on whether or not respondents tended to say that they faced physical risks 'about half the time', 'often' or 'always' (i.e. the lower half of Figure 2). Additionally, a linear outcomes regression was run on a 'risk score' variable. This measure was constructed by adding together metric scores based upon responses from questions 53, 54, and 55-7, such that a higher score indicates one or more answers being associated with greater concern and/or experience of risk³.

Models 1 and 4 do not use data on the country of respondent's work, whilst the other models in Table 1 are examples of 'multilevel' models, statistical models that use devices that designed to allow us to simultaneously assess both macro level variations (i.e. country to country differences) and micro level variations (i.e. individual level influences) as they are related to individual level data on risk. Specifically, in models 2 and 5, country level 'fixed effects' are used. This means that the coefficients summarised in the table represent the average influence of the explanatory factors completely net of country-to-country influences, i.e., they indicate the influence of, say, variations in gender, in terms of how it affects variations in risk 'within' countries. In models 3 and 6 by contrast, country level 'random effects' are used. This is a different modelling approach that means that control is built into the model for average differences from country to country in risk patterns, but that coefficients from the explanatory variables tell us about influences upon more or less risk in terms of a mixture of 'within' and 'between' country patterns.

Six models of interest are summarised in Table 1. The models show relatively little difference between those which analyse the 'risk score' as an outcome, (1)-(3), and those that analyse whether or not a respondent reports being at physical risk about half the time or more often, (4)-(6). Perhaps of greater interest is the substantial effect of countries upon the risk outcomes. Coun-

³ Scores were constructed by adding together the scores for the principal dimension (85.7% of inertia) of a multiple correspondence analysis between three variables: responses to q53; responses to q54; and a dichotomous indicator of whether or not the risk of physical injury or death was mentioned over q55-7. The risk score has a mean of 1.5, a range from 0 (lowest levels of physical risk) to 4.2 (highest levels of physical risk), and a standard deviation of 1.

try to country variation statistics suggest a correlation between countries and risk (after controlling for individual level factors) of around 0.3-0.4. This is a considerable value and suggests that physical risks are considerably bigger in some countries compared to others, irrespective of personal characteristics.

Figure 4 also depicts the overall patterns of country-to-country variation in concerns about physical risks. The first plot excludes controls for other factors (i.e. it shows average country-to country differences in risk scores), and the second focuses on country differences that are net of individual level factors, as in model (6). The figure uses the format of what are usually known as 'caterpillar' plots in multilevel statistical modelling. The values plotted represent the extent to which the particular country is estimated to deviate from the mean response outcome, taking account of patterns associated with that country and with the distribution of patterns across countries⁴. The mid-point of the line shows the estimated country deviation or 'residual', and the lines around it show the range of plausible values based upon estimated 'standard errors'. Conventionally, if the range of plausible values does not overlap the overall mean of zero, we conclude that there is evidence that that country has higher or lower levels of risk than average. For convenience of presentation, the values for countries are only shown if there were 6 or more respondents to the survey from that country.

Figure 4: Country to country variations in perceptions of risk

The plot shows two interesting patterns. Firstly, there is virtually no mediation in the country-to-country variation patterns before and after controlling for other individual level differences (such as in employment area or field of work). That is, the country level influences seem to be largely independent of individual level circumstances. Second, there is a considerable range of deviations from the average risk profile, with a number of countries (mainly European) where photographers report lower risks than average, and a number of other countries (often in South America and/or the middle east) where respondents report above average levels of risk. [The patterns revealed are very similar to those reported in the main report, but these patterns are based upon statistical modelling of average country to country variations, and should be more robust to sampling fluctuations or any other limitations to the data]. There are three plausible reasons why country to country variations have such a powerful impact on the level of risk, though these are not isolated or quantified by our data. They are, first, that photographers' working conditions vary from country to country and in some countries lives are just riskier for various reasons (such as high crime levels or political instability). Second, there are probably cultural variations in how respondents answer with some respondents likely to choose more extreme answers and others likely to downplay their attitudes or perceptions to risk. Third, it is possibly the case that in different countries, the sort of person answering the questionnaire could be structurally different from the photographer entering the WPP award, though our model does adjust for the worst excesses of this sort of difference.

5. Conclusion

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⁴ This property is known as 'shrinkage' towards the overall pattern, and means that the estimated values are slightly different to those that would be obtained by simply calculating the mean patterns of responses within in country (which is problematic when many countries have low numbers of respondents).

The disruption of the digital era has produced many profound changes in photographers' work patterns, income sources, technology use, and perhaps ethical principles. But few might have anticipated the growing threat of physical risk to which the overwhelming majority of photographers now feel they are increasingly vulnerable.

The first major international survey of professional photographers has presented the opportunity to record the attitudes, expectations and working environment of the people who provide much of the raw material that drives the digital age, the images, often without reward or acknowledgement.

From this data, we see that photographers as a whole feel they are extremely vulnerable to physical risk, though this is not the only risk to which they are subject. The risk of physical injury or death is felt strongly by all genders, almost all forms of photography and by all ages. But the strongest influence on this perception is the substantial effect of country of residence or work upon the risk outcomes. Physical risks are evidently considerably more significant in some countries compared to others, irrespective of personal characteristics.

For photographers, the digital age is indeed the age of risk.

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TABLES AND FIGURES

Figure 1: What worries photographers most

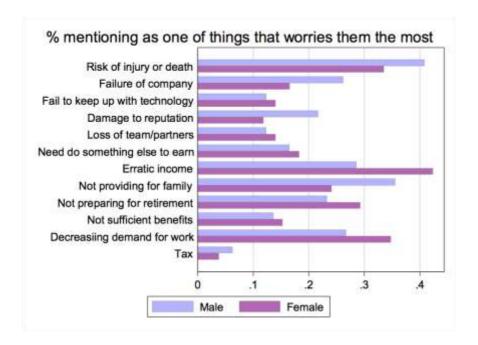


Figure 2: Relationship between physical risk faced at work correlated with future expectations

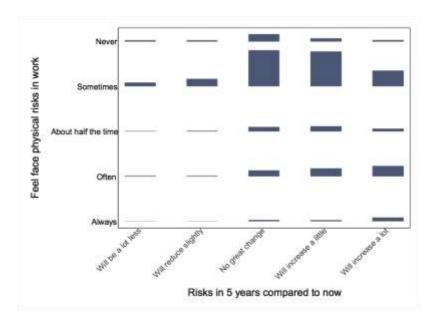


Table 1: Correlations between three measures of risk

	Q53: Whether or not face physical risks	Q54: Whether physical risks will increase in	Q55-7: Whether mentions risk of physical injury or
	physical fishs	the future	death as one of 3 biggest worries
	Association statistic (Cramer's V) and statistical significance (*95-99% threshold; **= >99% threshold)		
Gender	0.05*	0.02	0.05*
Age (10 year bands)	0.09*	0.07	0.08
Long-term job contract	0.04	0.01	0.06*
Self-employed	0.08**	0.02	0.08**
University level education	0.01	0.04	0.04
Studied photography at University	0.01	0.05*	0.01
No photography training	0.01	0.01	0.01
Mainly works in news	0.13**	0.13**	0.13**
Mainly works on personal projects	0.03	0.06*	0.04
Mainly works in environment/nature	0.01	0.05*	0.03

Notes: Analysis from 1556 respondents to the photography survey. Association statistics range from 0 to 1 with 0 indicating no association, 1 = perfect association. No symbol for statistical significance indicates less than 95% threshold reached (i.e. it is plausible that this pattern of association may have arisen due to chance sampling variations).

Figure 3: Perceptions of risk by continent lived-in

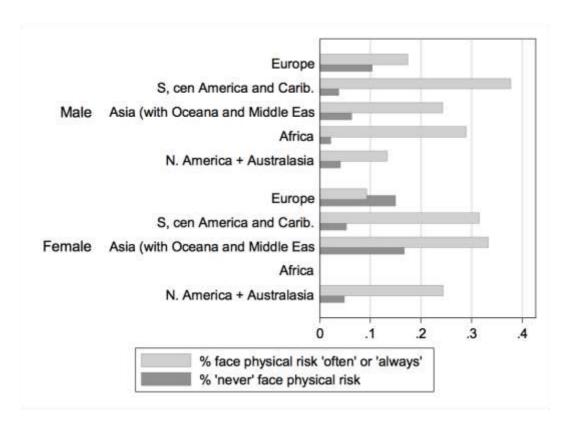


Figure 4: Country to country variations in perceptions of risk

