

## Personality and Social Psychology

# Flux and permanence of risk perceptions: Tourists' perception of the relative and absolute risk for various destinations

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The present investigation is a cross-sectional, multi-national, quantitative, and quasi-experimental comparison of tourists' risk perceptions regarding different destinations throughout the past decade. Over 10,000 tourists to Norway from 89 different countries filled in a questionnaire rating the perceived risk for various destinations. Data were collected during 2004, 2010, 2011, 2012, 2013 and 2015 and allow for a comparison of perceived risk across time, place and nationality. Results show that while absolute risk judgments for different destinations fluctuate somewhat over the years, relative risk judgments remain constant. Findings also reveal a "home-is-safer-than-abroad-bias" with tourists consistently perceiving their home country among the safest destinations. The current investigation is rare because it looks at more than one destination at a time. Insights gained from the present findings diverge from what would have been concluded from employing case studies, that is, looking at one destination at a time.

*Key words:* Risk perception, relative risk, terrorism, "home is safer than abroad" bias, quasi experiment.

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## INTRODUCTION

The public focus on various sorts of disasters, both man-made and natural ones, has been extensive during the past few decades. Nolen-Hoeksema (2010) accused the mass media of having created the impression of an overflow of natural disasters, political crises, and acts of terror and war in the public's awareness since the turn of the century. Examples of such crises include terrorist attacks like the ones in Paris in January and November 2015, natural disasters like the 2004 Boxing Day tsunami in the Indian Ocean, and health scares like the threat of a pandemic "Swine flu" (2009–2010). And indeed the numbers partly seem to justify this supposed impression in the public's awareness: as the Global Terrorism Index report (Institute for Economics and Peace (IEP) (2014)) shows, there has been over a five-fold increase in the number of deaths from terrorism since the turn of the millennium, rising from 3,361 in 2000 to 17,958 in 2013. Slovic (2002) claimed that the modern terrorism which is plaguing society is 'a new species of trouble' where the stakes are high and the uncertainties enormous.

Kasperson, Renn, Slovic *et al.* (1988) argued that some such disasters function as signals causing a social amplification of risks that by experts may be judged to be relatively minor. They claim that the social amplification of risks may cause an event to have ripple effects that extend far beyond its immediate and direct effect and may encompass many additional victims (e.g., companies, industries and even entire economies). An example of such a ripple effect is reported by Gigerenzer (2006) and Gaismaier and Gigerenzer (2012). They claimed that following the 9/11 terrorist attacks, highway fatalities increased due to a substitution of driving for flying caused by a fear of dread risk, which is the fear of a low-probability, high damage event. They

estimate that 1,500 people died on the road the following year attempting to avoid the fate of those killed on the 9/11 flights.

If such political crises and natural disasters are highly salient in the public's awareness one might expect them to have an influence on how people perceive the risk of various countries and travel destinations. And indeed the possible increase in tourists' perceived risk which might affect travel behaviour and purchasing choices is usually of great concern for the tourism industry immediately after some crises has hit a destination.

In the present study tourists' risk perceptions regarding a number of travel regions and destinations were assessed on several points in time over the past decade. The study constitutes a cross-sectional, multi-national, quantitative, and quasi experimental comparison of tourists' risk perceptions regarding different regions and destinations. It allows for direct and quantitative comparisons of risk judgments over different years. By comparing before and after measures for different regions/destinations from one year to another it becomes possible to investigate whether different naturally occurring events like terror attacks, natural disasters or other highly publicized incidents affect tourists risk perceptions. Furthermore if such effects can be observed, that is, if there are increases in perceived risk for a destination from one year to another due to some incident, the present study makes it possible to investigate whether such a change is large enough to change how the effected destination is perceived relative to other unaffected regions and destinations.

Within the tourism domain some research exists that has focused on the impact of terrorism, war and political instability on risk perceptions and travel choice among tourists. This research has been done along two lines: the first line of research is based on the analysis of tourism statistics following acts of terror (see for example: Neumayer, 2004; Yang & Wong, 2012). This has in

many cases shown that the number of visiting tourists declines somewhat after terrorist attacks, for example in Spain (Enders & Sandler, 1991), Northern Ireland (Pizam, 1999), Egypt (Wahab, 1996), China (Gartner & Shen 1992) and the USA (Lepp & Gibson, 2003). Some have also focused on the analysis of post conflict statistics, like for example Boyd (2000) who observed increasing numbers of visitors to Northern Ireland during the IRA's ceasefire periods, and Voltes-Dorta, Jiménez and Suárez-Alemán (2015) who reported a positive effect of the ETA's dissolution on the number of domestic tourists to the Basque Country.

The second line of research has focused more directly on how tourists perceive the risk of terrorism. Findings here seem to indicate that tourists' risk perceptions are affected by various events, however maybe not as much as could be expected from the above mentioned discourse on the subject and the extensive focus on the matter. Examples from this research include Sönmez and Graefe (1998) who found that risk perceptions influenced destination choice among tourists; and Reisinger and Mavondo (2005) who found risk perceptions to be correlated with travel anxiety. Gray and Wilson (2009) found that political hazards including terrorism were perceived as more risky than physical hazards and social hazards like, for example, the weather or a strange culture. They also found that travel desire was reduced to a greater extent by political hazards than by physical and social hazards. On the other end of the continuum, Uriely, Maoz and Reichel (2007) and Fuchs, Uriely, Reichel and Maoz (2012) found that tourists may disregard governmental advisories and travel to destinations threatened by terrorism. Those tourists reported low to moderate perceived risk about terrorism, and used different rationalizations to reduce their concerns. Bellhassen, Uriely and Assor (2014) even suggested that a conflict zone where the risks are relatively minor can attract international tourists by providing certain thrills within a "protected bubble". Also Chew and Jahari (2014) found that many of the tourists who had visited Japan prior to the Fukushima disaster of 2011 had intentions to revisit.

Much of the research on tourists' risk perceptions is either qualitative or correlational in nature. Very few studies have employed an experimental approach. Experimental or quasi experimental studies on the effect of negative events on tourists' risk perceptions require before- and after measures. The unpredictability of natural or man-made disasters, like for example, terrorism makes it extremely difficult to obtain such before and after measures. This is probably the reason why such research is scarce. Nonetheless there are some examples of quasi experimental designs that have studied before and after effects of terrorism on risk perceptions. Comparing before and after measurements Larsen, Brun, Øgaard and Selstad (2011a) found a direct effect of terror attacks on tourist's perceived risk. Participants in their study reported increased risk perceptions for Madrid as a holiday destination following the 2004 train bombings, and for London as a holiday destination after the 2005 bomb attacks on London's transport system. Participants' general desire to travel and risk judgments for other destinations remained unaffected. Brun, Wolff, and Larsen (2011) found that the terrorist attacks in London and Sharm el Sheik in 2005 were

associated with an increase in tourist's worries about terrorism, as well as an increase in the percentage of tourists who believed that the world had become more dangerous as a consequence of the 'War on terror'.

An interesting case is reported by Wolff and Larsen (2014) who compared before and after measures of perceived risk and worry in connection with the 22 July massacre in Norway. They found that risk judgments remained low and constant for several years before the massacre, while a slight but significant decrease in perceived risk for Norway as a destination was observed the year following the attack. While discussing possible explanations the authors speculated whether this counterintuitive finding might be caused by the gamblers fallacy (Tversky & Kahneman, 1971, 1974) and in fact the authors (Wolff & Larsen, 2016) do report some partial support for this assumption.

The present investigation follows the (quasi) experimental tradition of tourism risk research. It addresses a question that has been largely neglected by both correlational and experimental research, namely the question of how tourists perceive the relative risk of various destinations. As Voltes-Dorta *et al.* (2015) have pointed out; there is a scarcity of studies that look at more than one destination at a time. Comparing the relative risk of one destination to the other, and investigating whether the riskiness of one destination changes relative to another over time, may hold new information that cannot be gained from looking at one destination only. The present investigation addresses this issue. Data are collected for several destinations and on several points in time.

The study not only allows for a comparison of risk perceptions across time and across different regions and destinations, it also allows for a comparison of risk perceptions across different nationalities of tourists, that is whether tourists from different countries differ in the way they perceive the risk of different destinations. Such cross cultural comparisons of risk perceptions are not only important in order to be able to know more about the generalizability of the findings to other nationalities, they may also reveal systematic biases in the way we perceive risk. For example Larsen, Ning, Wang, Øgaard, Li and Brun (2011b) and Larsen, Brun, Øgaard and Selstad (2007) compared how participants of various nationalities judged risks regarding food and reported a "home is safer than abroad" bias, showing that participants perceive risks linked to food to be greater abroad than at home, regardless of where "home" is. That is in their sample of international participants, food risks were always judged to be lowest in the participants' home country.

It seems reasonable to expect similar findings in the present investigation. Participants from various nations might judge their own home country among the safest destinations, regardless of how other nationalities perceive the riskiness of that destination, that is, they will display the "home is safer than abroad" bias.

To sum up: this investigation will shed some light on the following questions. Do tourists' risk perceptions for different regions and destinations change over the years? Are such changes large enough so that the ranking of destinations according to their relative risk is different from one year to another? How do different nationalities of tourists perceive the risks of different regions and destinations?

## MATERIAL AND METHODS

The paper at hand is part of a continuing investigation of risk perceptions among tourists which started in 2004. Through the use of questionnaires various aspects of holiday making have been assessed. These include amongst others tourists' mood during their vacation, their travel motives and their attitudes towards the environment. The current paper presents data on risk perceptions regarding different travel destinations.

### Sample and design

Data were collected by means of questionnaires during the summer seasons (June to August) of 2004, 2010, 2011, 2012, 2013 and 2015. Participants were approached at popular tourist sites in Western Norway and asked whether they were tourists and whether they would fill in a questionnaire concerning different aspects of holiday making. The sites chosen for data collection were popular low threshold sites that most tourists would visit during a trip to the area; examples include the tourist information office and Mount Fløyen in the city of Bergen. As always in research on tourists, participants constitute a convenience sample from the indefinite population of tourists to the current area. The questionnaire was administered in English, Spanish, French, German, Japanese and Norwegian in 2004; in English and German in 2011; and in English only in 2010, 2012, 2013, and 2015. Response rates were very high, about 90%.

Data from a total of 10,097 completed questionnaires are being reported here. Participants came from all together 89 different countries, 51.9% of respondents were female, and the mean age was 40.75 (SD = 16.60). Table 1 shows the demographics of the different samples.

### Measures

Subjective risk assessments were obtained for nine different regions/destinations. These regions/destinations were derived by a procedure described by Larsen *et al.* (2011a). This procedure involved screening

local adverts that offered trips from Norway to other countries or parts of the world. This resulted in a list over 54 different destinations and holiday forms which could be purchased from Norway. A student sample rated these destinations and holiday forms for their riskiness. The three regions/destinations that were the least risky, the most risky and the closest to the median were included in the present study (see Larsen *et al.*, 2011a).

Perceived destination risk was measured in the following way: "Consider the following destinations; how risky would you judge them to be for you? Rate each destination concerning risk for unwanted events". This was followed by a list of nine destinations (as reported in Larsen *et al.*, 2011a): (1) Norway and the Nordic countries; (2) Germany, Austria or Switzerland; (3) musical and shopping in London; (4) cultural trips to Spain; (5) larger cities in Europe; (6) roundtrips in the USA; (7) larger cities in the USA; (8) roundtrip in Turkey; and (9) roundtrip in Israel. Answers were given on seven-point rating scales anchored by 'not risky' (1) and 'very risky' (7).

## RESULTS

Mean scores for destination risk are presented in Table 2. It shows that tourists' risk perceptions for the different destinations fluctuate somewhat, but not a lot over the years for all nine destinations. Destination risk scores are presented in ascending order. As can be seen 'Norway and the Nordic Countries' is perceived to be the safest region/destination, while 'Roundtrip in Israel' is perceived to be the most risky region/destination. Figure 1 also clearly shows that while absolute risk perceptions for all destinations fluctuate somewhat over the years the relative risk perceptions remain constant. In other words the ranking of the destinations according to their relative risk does not change over the years.

Table 3 and Figure 2 display the same destination risk scores this time by nationality of the respondent. It is obvious that tourists from all over the world tend to agree quite a lot on the

Table 1. Sample demographics

|                                  | 2004  | 2010   | 2011   | 2012  | 2013   | 2015  |
|----------------------------------|---|--|--|---|--|---|
| N                                | 1867  | 1173   | 1134   | 2669  | 2104   | 1150  |
| Mean age (SD)                    | 48.55 (16.13)   | 39.64 (15.49)  | 39.53 (16.30)  | 38.96 (16.32)   | 36.65 (15.03)  | 41.83 (17.07)   |
| Females                          | 53.5%   | 52.0%  | 51.5%  | 53.3%   | 47.9%  | 53.5%   |
| Mean length of trip in days (SD) | 14.54 (11.81)   | 14.98 (20.39)  | 15.66 (26.11)  | 14.69 (23.74)   | 16.63 (33.02)  | not assessed  |
| Top 10 nationalities             | Norway<br>(25.31%)<br>Great Britain<br>(16.26%)<br>Germany<br>(12.06%)<br>USA<br>(9.77%)<br>The Netherlands<br>(4.69%)<br>Japan<br>(3.55%)<br>Faroe Islands<br>(3.49%)<br>Denmark<br>(3.49%)<br>Sweden<br>(2.84%)<br>Spain<br>(2.46%) | Germany<br>(14.00%)<br>Great Britain<br>(12.83%)<br>USA<br>(10.13%)<br>Norway<br>(8.86%)<br>France<br>(6.96%)<br>The Netherlands<br>(6.79%)<br>Spain<br>(6.15%)<br>Italy<br>(5.51%)<br>Australia<br>(3.50%)<br>Poland<br>(2.28%) | Germany<br>(22.77%)<br>Great Britain<br>(14.78%)<br>USA<br>(9.64%)<br>Norway<br>(8.08%)<br>The Netherlands<br>(7.16%)<br>Spain<br>(3.49%)<br>France<br>(2.85%)<br>Australia<br>(2.76%)<br>Switzerland<br>(2.66%)<br>Italy<br>(2.57%) | Germany<br>(15.34%)<br>Great Britain<br>(13.98%)<br>USA<br>(12.05%)<br>France<br>(7.37%)<br>Norway<br>(5.70%)<br>The Netherlands<br>(5.47%)<br>Spain<br>(3.98%)<br>Italy<br>(3.60%)<br>Australia<br>(3.52%)<br>China<br>(2.72%) | Germany<br>(15.41%)<br>Great Britain<br>(11.63%)<br>USA<br>(10.88%)<br>The Netherlands<br>(7.36%)<br>France<br>(6.46%)<br>Spain<br>(4.37%)<br>Australia<br>(4.18%)<br>Poland<br>(3.88%)<br>Norway<br>(3.08%)<br>Switzerland<br>(2.58%) | Great Britain<br>(19.53%)<br>USA<br>(16.38%)<br>Germany<br>(11.93%)<br>Australia<br>(6.16%)<br>The Netherlands<br>(4.78%)<br>France<br>(3.60%)<br>Norway<br>(1.77%)<br>Sweden<br>(1.70%)<br>Brazil<br>(1.57%)<br>Denmark<br>(1.25%) |

Table 2. Destination risk for different years

|                                 | 2004                 |      | 2010                 |      | 2011                |      | 2012                  |      | 2013               |      | 2015                  |      | ANOVA |        |
|---------------------------------|----------------------|------|----------------------|------|---------------------|------|-----------------------|------|--------------------|------|-----------------------|------|-------|--------|
|                                 | M                    | SD   | M                    | SD   | M                   | SD   | M                     | SD   | M                  | SD   | M                     | SD   | df    | F      |
| Norway and the Nordic countries | 1.57 <sub>a</sub>    | 1.03 | 1.64 <sub>b</sub>    | 0.97 | 1.64 <sub>c</sub>   | 1.04 | 1.50 <sub>bcd</sub>   | 0.78 | 1.70 <sub>ad</sub> | 1.04 | 1.63 <sub>e</sub>     | 1.11 | 5     | 10,20* |
| Germany, Austria or Switzerland | 1.79                 | 1.07 | 1.89 <sub>a</sub>    | 1.05 | 1.83                | 1.08 | 1.75 <sub>ab</sub>    | 0.93 | 1.86 <sub>bc</sub> | 1.07 | 1.75 <sub>c</sub>     | 1.13 | 5     | 4,17*  |
| Musical and shopping in London  | 2.58 <sub>a</sub>    | 1.46 | 2.53                 | 1.37 | 2.56 <sub>b</sub>   | 1.34 | 2.59 <sub>c</sub>     | 1.30 | 2.54 <sub>d</sub>  | 1.33 | 2.38 <sub>abcd</sub>  | 1.43 | 5     | 5,19*  |
| Cultural trips to Spain         | 2.75 <sub>a</sub>    | 1.45 | 2.57                 | 1.39 | 2.70                | 1.41 | 2.70                  | 1.39 | 2.75 <sub>b</sub>  | 1.39 | 2.58 <sub>ab</sub>    | 1.42 | 5     | 4,34*  |
| Larger cities in Europe         | 2.98 <sub>a</sub>    | 1.46 | 3.06                 | 1.38 | 3.06                | 1.36 | 3.09 <sub>b</sub>     | 1.33 | 3.13 <sub>ac</sub> | 1.34 | 2.92 <sub>bc</sub>    | 1.43 | 5     | 5,40*  |
| Roundtrips in the USA           | 3.37 <sub>a</sub>    | 1.64 | 3.20                 | 1.40 | 3.33 <sub>b</sub>   | 1.48 | 3.26 <sub>c</sub>     | 1.46 | 3.34 <sub>d</sub>  | 1.42 | 3.11 <sub>abcd</sub>  | 1.57 | 5     | 6,34*  |
| Larger cities in the USA        | 3.77 <sub>a</sub>    | 1.66 | 3.73 <sub>b</sub>    | 1.50 | 3.80 <sub>c</sub>   | 1.58 | 3.73 <sub>d</sub>     | 1.51 | 3.78 <sub>e</sub>  | 1.49 | 3.48 <sub>abcde</sub> | 1.62 | 5     | 8,52*  |
| Roundtrip in Turkey             | 4.58 <sub>ab</sub>   | 1.62 | 4.22 <sub>acde</sub> | 1.48 | 4.44 <sub>cf</sub>  | 1.48 | 4.10 <sub>befgh</sub> | 1.53 | 4.54 <sub>dg</sub> | 1.44 | 4.45 <sub>eh</sub>    | 1.52 | 5     | 30,82* |
| Roundtrip in Israel             | 5.54 <sub>abde</sub> | 1.54 | 5.14 <sub>a</sub>    | 1.47 | 5.25 <sub>bce</sub> | 1.45 | 4.97 <sub>b</sub>     | 1.55 | 5.04 <sub>dc</sub> | 1.48 | 5.03 <sub>e</sub>     | 1.57 | 5     | 35,48* |

Notes: Scores sharing the same subscript are significantly different from each other,  $p < 0.05$ . \* $p < 0.001$ . One-way-ANOVA with Bonferroni corrected comparisons of whether risk perceptions for each individual destination differ between years. Numbers are mean values on a scale from 1 (low risk) to 7 (high risk).

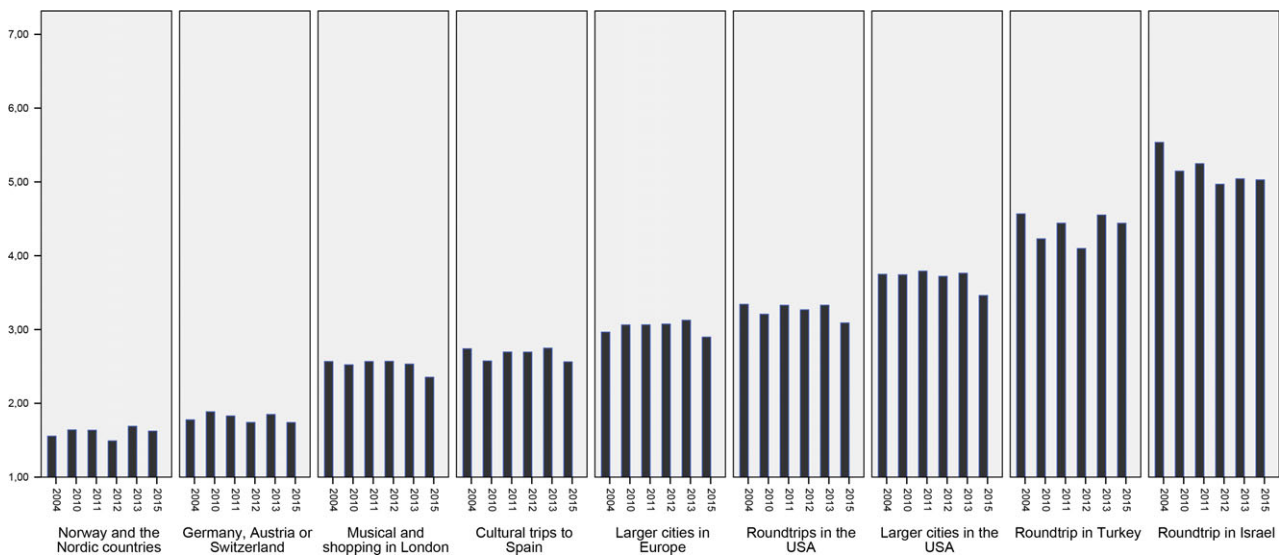


Fig. 1. Risk judgments for various holiday destinations among tourists to Norway (on a scale from 1-not risky to 7-very risky).

riskiness of different regions and destinations. With one exception: tourists tend to regard their own home country as a rather safe place. Seven regions/destinations receive lower risk ratings from their own residents than from respondents from other countries. (musical and shopping in London is rated equally risky by all respondents. Larger cities in Europe is not really a specific destination and is rated somewhat different by different nationalities.) The data do reveal that the least risky destinations, (i.e., Norway and the Nordic countries and Germany, Austria or Switzerland) are rated as “safer than home” by most nationalities, however in a direct comparison of “home country” with the total of all other destinations (which is the procedure employed by Larsen *et al.* 2007; 2011b) “home is safer than abroad” for all nationalities and destinations ( $p < 0.001$ ), with the exception of larger cities in the USA and Roundtrips in Turkey which are rated to be equally risky as other destinations by US and Turkish participants respectively. Overall there is a clear trend showing that “home” is safe, regardless of where “home” is.

DISCUSSION

Findings show that tourists distinguish between different travel regions/destinations when it comes to the risk for unwanted events at these destinations. The regions and destinations that are perceived to be the most risky are ‘Roundtrips in Turkey’ and ‘Roundtrips in Israel’. The safest regions are ‘Norway and the Nordic Countries’ and ‘Germany, Austria or Switzerland’. While risk perceptions fluctuate somewhat over the years within each destination, risk perceptions remain constant between destinations. In other words the absolute risk for each region/destination is slightly changing from some years to others; however the relative risk for each destination remains stable. The ranking of regions and destinations according to their relative risk is therefore unaffected during the past decade. This is despite the fact that various, sometimes quite dramatic events have befallen some of these destinations during that time period. Examples are ranging from terror bombings (Madrid 2004; London in 2005; Barajas Airport 2006, Turkey 2006, Norway, 2011; Boston 2013); via health scares (e-coli in Germany 2011) to deadly hurricanes

Table 3. Destination risk by nationality of respondent

| Nationality of respondent<br>Destination | Nordic respondents<br>(n = 1349) |      | German,<br>Austrian<br>Swiss<br>respondents<br>(n = 1808) |      | British<br>respondents<br>(n = 1450) |      | Spanish<br>respondents<br>(n = 335) |      | US-american<br>respondents<br>(n = 1128) |      | Turkish<br>respondents<br>(n = 23) |      | Israeli<br>respondents<br>(n = 29) |      | ANOVA |        |
|--|----------------------------------|------|---|------|--------------------------------------|------|-------------------------------------|------|--|------|------------------------------------|------|------------------------------------|------|-------|--------|
|  | M                                | SD   | M   | SD   | M                                    | SD   | M                                   | SD   | M  | SD   | M                                  | SD   | M                                  | SD   | df    | F      |
| Norway and the Nordic countries          | 1.50 <sub>a</sub>                | 0.88 | 1.55 <sub>b</sub>   | 0.89 | 1.50 <sub>c</sub>                    | .87  | 1.76 <sub>abcd</sub>                | 1.25 | 1.50 <sub>d</sub>                        | 0.83 | 1.33                               | 0.58 | 1.59                               | 0.89 | 6     | 4,59*  |
| Germany, Austria or Switzerland          | 1.87 <sub>a</sub>                | 0.99 | 1.60 <sub>abc</sub>                                       | 0.88 | 1.71 <sub>ab</sub>                   | 0.97 | 1.90 <sub>b</sub>                   | 1.22 | 1.82 <sub>c</sub>                        | 1.00 | 1.95                               | 1.16 | 1.96                               | 1.35 | 6     | 13,46* |
| Musical and shopping in London           | 2.43                             | 1.26 | 2.57  | 1.29 | 2.53                                 | 1.47 | 2.53                                | 1.48 | 2.46                                     | 1.35 | 2.40                               | 1.27 | 2.30                               | 1.27 | 6     | 1,70   |
| Cultural trips to Spain                  | 2.61 <sub>a</sub>                | 1.28 | 2.54 <sub>b</sub>   | 1.24 | 2.65 <sub>c</sub>                    | 1.37 | 1.99 <sub>abcd</sub>                | 1.45 | 2.78 <sub>ab</sub>                       | 1.38 | 2.95 <sub>d</sub>                  | 1.43 | 2.22                               | 1.01 | 6     | 16,65* |
| Larger cities in Europe                  | 2.94 <sub>a</sub>                | 1.32 | 3.01 <sub>b</sub>   | 1.26 | 3.27 <sub>abc</sub>                  | 1.41 | 2.74 <sub>bc</sub>                  | 1.42 | 3.04 <sub>c</sub>                        | 1.44 | 2.65                               | 1.14 | 2.61                               | 1.26 | 6     | 11,54* |
| Roundtrips in the USA                    | 3.34 <sub>a</sub>                | 1.42 | 3.30 <sub>b</sub>   | 1.38 | 3.50 <sub>bc</sub>                   | 1.53 | 3.38 <sub>d</sub>                   | 1.52 | 2.44 <sub>abde</sub>                     | 1.42 | 3.45 <sub>c</sub>                  | 1.57 | 2.56 <sub>c</sub>                  | 1.19 | 6     | 65,32* |
| Larger cities in the USA                 | 3.56 <sub>ab</sub>               | 1.47 | 4.00 <sub>ace</sub>                                       | 1.45 | 3.94 <sub>bd</sub>                   | 1.55 | 3.70 <sub>cf</sub>                  | 1.55 | 3.04 <sub>bef</sub>                      | 1.62 | 3.50                               | 1.76 | 2.75 <sub>cd</sub>                 | 1.46 | 6     | 55,84* |
| Roundtrip in Turkey                      | 4.25 <sub>abc</sub>              | 1.50 | 4.17 <sub>def</sub>                                       | 1.43 | 4.55 <sub>ad</sub>                   | 1.54 | 4.55 <sub>bc</sub>                  | 1.64 | 4.61 <sub>cf</sub>                       | 1.60 | 2.85 <sub>abcdg</sub>              | 1.69 | 4.48 <sub>g</sub>                  | 1.70 | 6     | 18,76* |
| Roundtrip in Israel                      | 5.06 <sub>ab</sub>               | 1.54 | 5.23 <sub>ac</sub>  | 1.45 | 5.39 <sub>bd</sub>                   | 1.48 | 5.28 <sub>c</sub>                   | 1.49 | 4.90 <sub>cde</sub>                      | 1.60 | 5.20 <sub>f</sub>                  | 1.85 | 1.89 <sub>abcef</sub>              | 1.07 | 6     | 34,71* |

Notes: Scores sharing the same subscript are significantly different from each other,  $p < 0.05$ . \* $p < 0.001$ . One-way-ANOVA with Bonferroni corrected comparisons of whether risk perceptions for each individual destination differ between years. Numbers are mean values on a scale from 1 (low risk) to 7 (high risk).

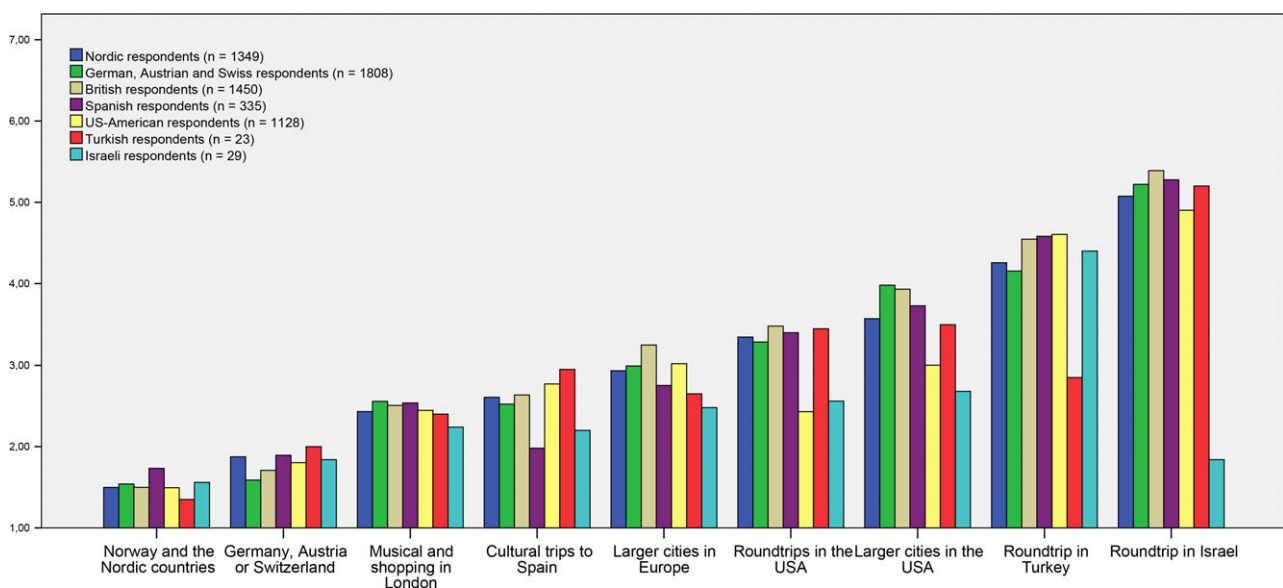


Fig. 2. Risk judgments for various holiday destinations among tourists to Norway by nationality of respondent (on a scale from 1-not risky to 7-very risky).

(Katrina 2005; Sandy 2012). The list of terror events that occurred in Israel during the time period is sheer endless. These at times ghastly events might explain some of the fluctuations in risk perceptions that are found within the different regions/destinations; however they do not effect tourists' risk perceptions enough to move any of the destinations on the relative risk ranking.

This finding points to some interesting insights that can only be gained by employing (quasi) experimental studies. Repeated measures are required and it is necessary to look at more than

one destination a time (Voltes-Dorta *et al.*, 2015). Looking at individual destinations over the years may easily lead to the conclusion that risk perceptions and therefore the number of visiting tourists to each destination fluctuate because of the occurrence of different dramatic events. Looking at several destinations at the same time however leads to a different conclusion, namely that relative risk perceptions for different regions and destinations remain constant over the years despite the occurrence of different sorts of dramatic events at some of these



destinations. Unless tourists desire to travel in general declines because of such dramatic events (and research indicates otherwise, e.g., Larsen *et al.*, 2011a) one should not expect that the number of visiting tourists to any given destination is strongly influenced by such events, at least not in the long run. This is because incidents such as those described above may lead tourists to perceive an affected destination as slightly more risky than the year before; however that destinations' risk compared to other destinations remains unchanged. In other words the perceived risk for various regions is very stable indicating that dramatic events do not have huge or long-lasting effects on tourists' risk perceptions. This is probably good news for the tourism industry. It implies that the effects of various events on the number of visiting tourists are likely to be small and short-lived. At the same time it implies that a reduction of negative events, like for example a reduction in the number of terror attacks, or a cease-fire may not increase the number of visiting tourists very quickly or dramatically.

The comparison of how different nationalities perceive the risk of various regions and destinations shows that tourists from all over the world tend to agree on the riskiness of these destinations. For example all of the investigated nationalities tend to agree that Norway and the Nordic countries are among the safest destinations, whilst Turkey and Israel are the riskiest. There is one exception though: tourists tend to regard their own home country as a very safe destination, sometimes in stark contrast to what all other tourists believe. Israeli tourists for example believe that Israel is just as safe as Norway and the Nordic countries which are the two destinations that differ most in riskiness according to all other tourists. In contrast to Turkish tourists they do however recognize that a trip to Turkey is a rather dangerous undertaking. Spanish tourists believe Spain to be safer than everybody else does, and tourists from the US evaluate destinations in the USA less risky than most other nationalities do. In other words, tourists tend to agree that "home" is safe, regardless of where "home" is.

This finding is not only amusing, but it is also in line with the initial hypothesis and the "home is safer than abroad" bias reported by Larsen *et al.* (2007, 2011b) who showed that tourists perceive risks linked to food to be greater abroad than at home, regardless of where "home" is. Several explanations for these findings are conceivable. People might have higher perceived control when they are in their own home country; that is they think they are better at avoiding both food risks and other risks when they are at home than when they are abroad. Increased perceived control is known to lower risk perceptions when assessing one's own personal risk (see for example: Klein & Helweg-Larsen, 2002; Shepperd, Carroll, Grace & Terry, 2002).

It is also possible that participants do not only decrease the risks at home, they may also inflate the risks abroad. This would be an example of the impact bias (Wilson & Gilbert 2003), that is, the tendency to overestimate both the intensity and durability of future emotions. Larsen, Brun and Øgaard (2009) found that potential tourists (i.e., students) reported higher travel related worries regarding a number of hazards including terrorism compared to traveling tourists. Similar findings are reported by Wolff and Larsen (2016), who found higher terror risk estimates, which were not explained by age differences, in students than in tourists.

And finally, when judging the relative risk of home country and other countries, tourists might search (or sample) their memories

for information about both home and other regions. Most memories about a participant's home country will indicate not risky. This will hold true even for participants from relatively terror prone countries like Israel. However when recalling (or sampling) memories from other countries, participants are more likely to recall risky events, simply because these are the ones portrayed in the media, and participants will lack memories that indicate not-risky. Therefore the "sample" of memories regarding a foreign country will be biased towards risky. This sampling account (e.g., Fiedler, 2000; Sedlmeier; Hertwig & Gigerenzer, 1998) implies that it is not the participant's cognition which is biased but rather the information (or samples) they are basing their judgements on.

#### LIMITATIONS AND CONCLUDING REMARKS

The present study has some limitations which restrict the conclusions that can be drawn from it. One such limitation is the fact that convenience samples were used. This of course might limit the generalizability of the results. It is however impossible to obtain random or even representative samples of tourists, since this is an ever changing and not a clearly defined population. The comparably large sample size reduces some of the problems associated with convenience samples.

The fact that most tourists perceive Norway and the Nordic countries to be the least risky region of all has other possible explanations than the fact that it probably is quite safe. Both explanations are related to the fact that data were collected in Norway. First there may be a selection bias; tourists who come to Norway might be the ones that believe it to be a very safe destination. Second, if participants are affected by the impact bias or by biased samples of remembered risky and not risky events, they might overestimate the risk of places they are currently not at, compared to the risk of the place they are currently visiting, namely, Norway.

It is also true that other regions and destinations not included in this investigation could have been assessed. And the destinations that are investigated differ in the sort of holiday they describe, and with regard to how specific they are depicted. For example 'musical and shopping in London' is a more specific item than 'Norway and the Nordic countries'. This does of course make it difficult if not impossible to directly compare the riskiness of different countries. For example, big city vacations might be perceived differently than round trips despite the country they take place in. That being said, it was not the aim of the present investigation to estimate the absolute risk of any specific country, destination, or holiday form. On the contrary, the aim of the present investigation was to investigate whether the perceived riskiness of any given destination or holiday form would change over time in accordance with salient and dramatic events. In other words, the most important message to be learned from the results is not how risky any specific destination is perceived to be. It is rather the fact that no matter how risky any specific destination is perceived to be, dramatic events are unlikely to change that destinations perceived riskiness relative to other destinations.

A related problem is the fact that some of the regions or destinations are rather unspecific, like for example "larger cities in the US" or "larger cities in Europe". Increased worries or risk perceptions after terror attacks might however concern only the

specific location of the attack (e.g., Larsen *et al.* 2011b). Further research will have to address this issue. That being said, it is still true that the most specific destination (musical and shopping in London) does not fluctuate more than the less specific regions.

To conclude, findings are in line with the 'home is safer than abroad bias' with tourists consistently perceiving their home country among the safest destinations, regardless of where home is. Findings also show that absolute risk perceptions might be influenced by dramatic events such as for example the 22 July massacre in Norway, the bombings of Marmaris, Antalya and Istanbul in Turkey or the e-coli incident in Germany. However changes do not always occur, they do not always occur in the expected direction (see Wolff & Larsen, 2014 for a discussion), and they are not large enough to move any region or destination on the relative risk ranking. While relative risk perceptions for individual destinations fluctuate somewhat over the years, absolute risk perceptions remain constant. It therefore seems unlikely that the number of visiting tourists will be strongly influenced by different dramatic events. This is because dramatic occurrences may lead tourists to perceive any affected travel destination as more risky than the year before, however compared to other destinations, risk perceptions remain unchanged.

The present findings are rare because they include before and after measures concerning a host of dramatic events that have occurred during the last decade. Such data are very difficult to obtain, but in doing so one avoids a number of problems that are associated with employing after measures only, like hindsight bias, rosy retrospection or otherwise skewed memories. The current investigation is also rare because it looks at more than one destination at a time. Voltes-Dorta *et al.* (2015) point towards the need for such studies, and the present findings highlight their importance. This is because insights gained from the present findings diverge from what would have been concluded from looking at one destinations at a time. Therefore the present study illustrates the absolute importance of assessing the relativity of risk perceptions.

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