



Universiteit Twente

News coverage on terrorism-
*The influence of affect-laden images on information
processing*

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Abstract

The goal of the present study was to investigate the question whether effective cognitive functioning and processing of the information provided in the news is possible, when the presented information is accompanied by images of terrorist attacks, threats or propaganda. In more scientific terms, it should be asked which effect images that evoke negative affect such as fear or anxiety have on peoples' cognitive capacities. This appears to be a relevant question since it has been established that mass media have advanced into most psychological lives in the sense that both media news and stories have an effect on people's risk perception. Analyses yielded significant but only moderate results regarding both the effect of the delivery mode of the image on cognitive functioning and the negative correlation between negative affect and effective information processing.

Introduction

Ever since the terrorist attacks of 9/11 in New York or the bombings in London and Madrid, terrorism plays an ever-present role in most people's risk perceptions. According to a study about transatlantic public opinions, 65% of European citizens and 91% of the Americans consider international terrorism to be an “extremely important“ threat to their countries regarding the national security over the following ten years (German Marshall Fund of the United States & The Chicago Council on Foreign Relations, 2002). A study that has been conducted by the European Commission (2008) showed that 53% of the 30.000 Europeans that took part in the survey consider international terrorism to be a risk to the world. These high percentages of risk perception may seem surprising, taking into consideration that the minority of the European and American population has ever personally experienced a terrorist attack. One might wonder why people's risk perceptions regarding terrorism are as high as they obviously are.

The media. The link to media coverage about terrorism is rapidly. Media deliver the latest news to the audience so that they are informed about the events taking place locally and worldwide. On average, 69% of the citizens of the European Union watch the news every day on television, a source that almost two-thirds of the users trust (European Commission, 2002a). Only 20% across the European Union use the internet on a daily basis. However, 71% of those internet users consider it as a valuable source of information and news gathering (European Commission, 2002b). These two types of media are capable of immediately reacting to current events and providing the news with the highest up-to-dateness, in addition to working with audiovisual means such as recorded videos, respectively. This makes them powerful news sources since they are both able to provide vivid pictures of the latest events like terrorist attacks right away to a broad audience and they are in the position to decide which images the viewers watch. However, this entails a great responsibility and sensitivity regarding what *should* be broadcasted.

Nowadays, it has been established that media have advanced into most psychological lives and that there cannot be any doubt about the impact that media content has in terms of shaping people's interpretation of the events displayed (Giles, 2000). This development cuts both ways. On the one hand, media coverage can have beneficial effects right after disasters

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like terrorist attacks when contributing to the clarification of the incident by providing accurate information or by advising behavioral measures. This can reassure and calm the disturbed public (Alexander & Klein, 2003). On the other hand, taking the events of 9/11 as an example through which a new dimension of terrorism has been introduced, media coverage made a contribution to a wave of speculation and conspiracy theories which rather fueled uncertainty and fear since mighty unknown sources were considered to have caused the disaster. In cases like terrorist attacks, news on television and on the internet are a major source the public gets the first information from and therefore relies on the depictions conveyed by the media. Based on that, perceptions of risks and disasters can be, deliberately or not, manipulated, that is to say minimized or magnified. Framing is an example of this manipulation since it is a journalistic means with the goal to both elicit and maintain the viewers' interest in the topic and to increase the likelihood that the news report will be well memorized. Hence, the journalist establishes an interpretation framework (Heuvelmann & Fennis, 2005). It is also worth to look at Slovic's and Weber's work on the social amplification of risk theory (2002) in which they recognize the central position mass media can have regarding dramatizing minor public risks. Furthermore, Rodrigue (2001) found that *media sensationalism* can increase people's risk perceptions. Thus, journalists searching for compelling images and stories instead of reliable information can affect the viewers negatively.

Although the debate about how strongly media content does influence people's risk perceptions is still controversial, the most fundamental effects regarding altering risk perception seem to be via availability (Wahlberg & Sjöberg, 2000). According to the availability heuristic theory (Tversky & Kahneman, 1973), people rate frequencies and probabilities of events to happen based on how easily those events come to mind. They use heuristics. Thus, mere media exposure, which promotes the frequency and therefore probability that information comes easily to mind, can influence risk perceptions.

Terrorism and the media. Studies have shown that television coverage in the aftermath of both 9/11 and Oklahoma City bombing has been positively correlated with posttraumatic stress disorder and depression (Ahern et al. 2002; Pfefferbaum et al. 2000). Being repeatedly exposed to images of people jumping or falling out of the windows of the World Trade Center seemed to play a key role. Taking this into consideration, the question comes up whether the

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primary goal of news reports, namely informing the public, can actually be achieved when presenting disturbing images of terrorist attacks and threats from all over the world or whether this leads to exactly the opposite- a declined information processing due to increased risk perception and other psychological reactions evoked by the threatening visual material. If the latter is true, broadcasting pictures and videos of terrorist threats and actions, might be useful for only one party- the terrorists who get public attention. Findings indicate that most terrorists perform attacks at least partly for the public attention they get through the media (Silke, 2001). This assumption is in accordance with Hall, Norwood, Ursano, Fullerton, and Levinson who are cited that it is “[t]he primary goal of terrorism [...] to disrupt society by provoking intense fear and shattering all sense of personal and community safety. The target is an entire nation, not only those who are killed, injured, or even directly affected“ (in Bongar et al. [Eds.], 2007). Several examples of recorded terroristic attacks and threats can be found on the internet where a considerable number of German newspapers and television stations provides articles with diverse photographs, videos and news reports.

Psychological and cognitive background. The extent to which those images manipulate people's risk perception or, in other words, induce fear, anxiety and other affective responses, must be considered as highly relevant. This is the case since those psychological reactions have been assumed to affect cognitive functions such as information processing, which has been explicitly elaborated in the following. This process is of importance for memorizing the information provided in the news. As a result, the central question of this study whether effective cognitive functioning and processing of the information provided in the news is possible when the presented information is accompanied by images of terrorist attacks, threats or propaganda. In more scientific terms, it should be asked which effect images that evoke negative affect such as fear or anxiety have on peoples' cognitive capacities. Again, answering this question is relevant since communicating the latest events and facts occurring in the world in a manner that facilitates rather than inhibits effective information processing should be the main goal of news coverage.

Risk perception as affect. It can be assumed that the way in which both media news and stories are presented, has an effect on the evaluation of risks (Flynn, Peters, Mertz & Slovic, 1998). In literature, the concept of risk perception has been defined in several ways, resulting

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in different connotations. An example is the notion that risk perceptions ‘[...] include[s] people’s beliefs, attitudes, judgments and feelings, as well as the wider cultural and social dispositions they adopt towards threats to things we value’ (Pidgeon et al., 1992; p.82). According to the protection motivation theory (Rogers, 1975), variables relevant to account for the concept of risk perception are perceived severity, perceived vulnerability and fear. Comparing those two conceptions, it becomes obvious that the psychological component *affect* plays an important role in risk perception, be it as *feelings* or more precisely as *fear*. In literature, a lot of studies can be found that are in accordance with this assumption. For example, in a review of studies about risk perception and preparedness for earthquake hazards, Lindell and Perry (2000) found that ratings of fear or concern about a hazard were used as risk measures. The appraisal-tendency framework proceeds on the basic assumption that feelings are not only a product but also a cause of certain cognitive appraisal processes which determine the evaluation of risk (Lerner et al, 2003). In terms of the core issue of this study, it appears to be especially logical to apply the concept of risk perception with emphasis on affect. In accordance with Slovic and colleagues who cited “[t]hat intuitive feelings are still the predominant method by which human beings evaluate risk [...]“ (Slovic, Finucane, Peters, & MacGregor, 2004; p.1), it can be assumed that the first reaction to threatening news images are emotions which, in turn, mainly influence further information processing. This assumption finds further support in other research in which worry, as a manifestation of anxiety, is seen to be superior to cognitive elements of risk perception in terms of the motivation to seek and process information about risk (Griffin et al. 1994). According to the phenomenon of affective interference, this can also have deteriorating effects on deep and complex information processing, that is to say, in cases when a person's anxiety level has been elevated (Turner, Rimal, Morrison & Kim, 2006). To sum up, in this study the concept of risk perception is understood in terms of its element affect, more particularly the level of negative affect that is supposed to constrain effective cognitive processing.

Affect-laden images. Previous studies have demonstrated that simply seeing fear-inducing graphic images can evoke traumatic symptoms due to the potential to create a witnessing experience and being repeatedly confronted with these traumatic reminders can result in permanent traumatic conditions (Hayez, 2001). Based on that, it can be assumed that media coverage on catastrophic events can predict levels of stress. This is true regardless of

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the geographical distance between the viewer and the scene of events (Pfefferbaum et al., 2000, 2003). With reference to memorizing information, research results indicate that negative information is better memorized than positive one since it unconsciously requires more attention also if one tries not to concentrate on it. This is called the diagnosticity effect (Buss, 1999). Newshagen (1998) found support for this drawing power that bad news seem to exude. When he presented fear-inducing pictures, the subjects even made an effort to get a closer look. However, according to Lang and colleagues (1995), right after seeing emotional images such as accidents, disasters or war, the capacity to process information is constrained. So far, the cited research findings indicate that affect-laden images increase risk perception, which has also been supported by Yamagishi (1997). Furthermore, negative affect like fear and anxiety, is negatively correlated with information processing; an assumption that also finds support in research by Huddy and colleagues (2005). In the majority of the reviewed studies, media are presented in an unfavorable way (Vasterman et al., 2005). For example, Brewin (1994) especially devalues the key feature of television, namely visual features. He points out that “Television is the worst offender because the visual impact is unforgettable and any reasonable sense of proportion goes out of the window.” (Brewin, 1994; p.208). Nowadays, he could claim the same about the internet which works with very similar and even more extensive audiovisual means than television. Brewin’s statement is particularly interesting at the end of this paragraph, since it provides a forceful summary of the above-stated findings that images can have a disturbing lasting effect on the viewer which is of substantial interest in the present study.

Thus, the question arises to what extent news reports about threatening events such as terrorist attacks should additionally be supported by threatening images when the main goal should be that people remember the provided information properly.

Besides the discussed main variables that affect the relationship between risk perception and information processing, relevant additional factors that can be assumed to have an influence on affect and cognitive processing, have to be considered. Elaborating those additional variables in the following will append valuable supplemental information to the theoretical basis which has been established so far in order to examine the main research question.

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Institutional trust and source credibility. It has widely been agreed upon the assumption that trust has a decreasing effect on risk perception (Poortinga & Pidgeon, 2003). A specific component of trust, which is important when being confronted with risks, is called institutional trust. The concept implies that an individual is willing to rely on public institutions and its representatives that have the expertise and capacity to make decisions and take action to protect the public in case of a threat to its safety and health (Siegrist, Cvetkovich, and Roth 2000). In terms of news coverage about potential threats, this specific aspect of social trust can be considered to be as important as source credibility, which is a component of interpersonal trust. According to McCroskey and Teven (1999), the credibility of a source is determined by factors such as competence and trustworthiness, as well. Research on commercials shows that seeing a popular and trusted person who conveys the message of a commercial can positively influence the memorization and appreciation of the content (Mittelstaedt, Riesz & Burns, 2000). In the present study, it is presumed that the same might be true for news reports with threatening content about the risk of terrorist attacks, well.

Perceived control. Another factor that can influence risk perception is the personal control which the individual perceives to have to protect itself and significant others from possible harm caused by a potential threat (Ajzen & Timko, 1986). The term can also be understood as perceived self-efficacy (Bandura, 2000) which is assumed to affect human functioning. The latter comprises emotional and cognitive aspects such as analytical thinking, hence cognitive processing and functioning (Bandura, 2001; Maibach and Murphy, 1995). While the risk perception attitude (RPA) framework states that the impact of risk perceptions generally has to be evaluated in the context of an individual's perceived self-efficacy (Rimal and Real, 2003), Turner and colleagues (2006) experimentally demonstrated that anxiety which was generated through risk induction, was not affected by efficacy beliefs. However, other studies support the framework assumption. Findings indicate that when the level of fear is higher than the perceived self-efficacy, defensive avoidance mechanisms take place to control the fear (Witte, 1992, 1994). This can include ignoring and blanking out the provided information. In combination with institutional trust, high levels of efficacy beliefs can even decrease negative affect (ter Huurne & Gutteling, 2009).

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Stylistic and format factors in media coverage. With regard to the enhancing effect that positive emotions have on memory, arousal has been considered to be the determining factor (Cahill & McGaugh, 1995). A possible explanation is that arousal and attention are closely linked to each other. The less aroused the viewer is regarding the news report, the less attention they pay to it. Yet, the opposite is not true; too much arousal can have diminishing effects on the attention capacities (Pavelchack, Antil, & Munch, 1988).

Since news reports on television and on the internet are mostly supported by either static or a sequence of dynamic images (videos), it seems relevant to find out how those two delivery modes affect cognitive functioning and information processing. It has been assumed that the dynamic visual display (DVD) is generally more effective in terms of facilitating learning than the static visual display (Park & Hopkins, 1993). Attracting attention through vivid elements provides an explanation for this assumption. Vividness has been considered to be an important factor in the context of viewers' involvement, as well. It is assumed that vivid information attracts attention through its emotional interest, psychological closeness and by inviting people to process the information visually by means of picture presentation (Nisbett & Ross, 1980). However, Brosius and Berry (1990) found that involvement plays a less crucial role than the perceived importance of the news topic, when good memorization of the provided information should be achieved. Perceived importance of the news topic was even found to increase involvement (Johnson, 2005). Other findings indicate that it is exactly the level of involvement, elicited by the perceived susceptibility and severity of a risk, which motivates information processing (Turner et al., 2006). In addition to that, involvement is assumed to have a positive influence on information seeking behavior (Johnson, 2005) which can, in the best case, result in the reduction of uncertainty (Atkin, 1973). This leads, in turn, to a decrease in risk perception (ter Huurne & Gutteling, 2008). It has also been hypothesized that the perceived relevance of the risk itself is a motivator for systematic processing of information about high risk and severe consequences in which it seems to be of higher importance than stylistic factors of the message such as structure and style (Griffin, Neuwirth, and Dunwoody, 1995).

For good processing of information, it is further of importance that the presented pictures and the content of the delivered information are congruent (Heuvelmann & Fennis, 2005). This has also been suggested by Gunter (1987) who partly explains bad memorization of news information by the lack of fit between visual material and the audible content. To

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conclude this part about means of the media, on the one hand, media characteristics in terms of format variables such as poor congruence of the audiovisual materials can require too much processing capacity which can result in constraints in the processing and memorizing of information (Heuvelmann & Fennis, 2005). On the other hand, image characteristics such as dynamic images can even facilitate cognitive processes. The latter is of interest for the core question of the present study since the assumption that dynamic images facilitate cognitive processes might imply that dynamic pictures in general might not evoke or even decrease negative affect such as fear and anxiety. This can be presumed since it has been stated before that negative affect and information-processing are negatively related.

So far, literature research has provided the fundamental theoretical basis to apprehend the relevant concepts in order to answer the central study question whether effective cognitive functioning and processing of the information provided in the news is possible when the presented information is accompanied by images of terrorist attacks, threats or propaganda. In more scientific terms, it should be asked which effect images that evoke negative affect such as fear or anxiety have on peoples' cognitive capacities. In combination with the assumed relevance of the delivery mode regarding cognitive processing and functioning, the following hypotheses are examined based on the factors image and delivery mode with the levels confidence-inspiring vs. threatening and dynamic vs. static, respectively.

Hypothesis 1: Images significantly influence affect, in the sense that threatening images induce higher levels of negative affect than confidence-inspiring images

Hypothesis 2: Dynamic images **(a)** do not significantly induce higher levels of negative affect than static images do and **(b)** facilitate effective information processing

Hypothesis 2.1: Dynamic images facilitate effective cognitive functioning

Hypothesis 3: Negative affect inhibits effective **(a)** information processing and **(b)** cognitive functioning

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Hypothesis 4: There is a mutual effect of image and the delivery mode, in the sense that the threatening/static condition yields a significantly poorer performance in cognitive processing and functioning than the confidence-inspiring/dynamic condition

Method

Design and procedure. The experimental study was conducted during a three-week period in July 2009. Based on a 2x2 between-subjects design, the two explanatory factors *image* and *mode* with the levels *threatening* vs. *confidence-inspiring* and *dynamic* vs. *static*, respectively, were studied to assess their impact on effective cognitive processing and functioning. The survey contained both the experimental manipulation and a German worded questionnaire to measure the manipulation effect. Data were collected through an online survey in Germany. People ($n = 220$) were approached via an online network for German students and received a written online invitation to take part in the survey. The invitation contained a brief and general description of the goal of the study as well as the link to the website that administered the study. The four different affect manipulations were randomly assigned to the people approached through randomly distributing one of the four links in each invitation that directed the participants to one of the surveys. The four surveys only differed in the manipulation condition, while content and items remained identical. Before beginning the questionnaire, the participants were, again very generally, informed about the goals of the study and received further instructions as well as the assertion that their data would be processed completely anonymously. After participants had answered the questions in the first section, a short text appeared, containing the information that they were about to see a short extract of a recent news report followed by some questions. Respondents were instructed to start the sequence after checking their headsets and to return to the next block of questions as soon as the news report was over.

Based on the results of a qualitative pilot study with a sample of $n = 5$ respondents, the questionnaire could be carried over in its original version with only minor modifications in terms of the wording.

Sample and respondents. In total, 135 people took part in the survey which indicates a high response rate (61%). However, the data of 16 participants could not be considered for further processing due to incomplete questionnaires. Since items that measured the manipulation effect were skipped, important inferences regarding the goal of the study could not be drawn. In order to ensure a level of comparability among the participants, the data of those that indicated a different educational status than *student* were not included in the

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analysis. Based on this filtering process, the data of 106 participants, or 78.5% of the initial response sample, could be used for further analysis. Those respondents ranged in age from 20 to 30 years with a mean of 23 years per condition ($SD=1.86$). The ratio between male and female participants was found to be in balance, with 51% and 49%, respectively. The great majority of participants (84.9%) indicated to live in a major city ranging from one hundred thousand to one million inhabitants. In combination with the fact that 88.7% stated that there were big public buildings like central stations or soccer stadia in their city, it can be assumed that most of the participants are daily exposed to a certain degree of objective vulnerability to terrorist attacks. Furthermore, respectively 40.5% and 78.8% of the participants watch television and use the internet for private purposes on a daily basis, ranging from 1 to 6 hours. This points to a high probability that respondents are frequently exposed to images of terrorist threats or the consequences of terrorist attacks presented in the news, be it on television or in the internet. However, only 10.4% of the respondents indicated to think about the risk of a terrorist attack once or twice a week, while no one thinks about it on a daily basis which implies a low awareness.

Instrument. An online questionnaire was applied which was divided into a pre- and post-manipulation section. Relevant items to classify the participants, such as demographics, were comprised in the first part as well as items measuring *institutional trust*, *perceived importance* and *awareness* of the topic terrorism. Items measuring the two dependent constructs as well as *perceived self-efficacy*, *personal relevance* and again *institutional trust*, were administered in the second part. At the end, a commentary box offered participants the possibility to comment on content and design of the questionnaire which was frequently used and yielded valuable information regarding the perceived congruence of the visual and audible material. This will be further elaborated in the discussion section.

Experimental manipulation. In the *confidence-inspiring/static condition*, participants saw a static photograph depicting German Chancellor Angela Merkel in an upright and confident posture. This photograph was accompanied by the recording of a male newsreader's voice who read a fictional text containing information about a recently emerged terror video with concrete threats against a number of German cities. The *confidence-inspiring/dynamic condition* contained for the most part a sequence of different television appearances of

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Chancellor Merkel having energetic speeches. The appendant sound was, however, cut off and replaced by the recording of the newsreader's voice presenting the same text as in the first condition. The latter applied to the other two conditions, *threatening/static* and *threatening/dynamic*, as well. In terms of the images presented in the *threatening/static condition*, participants saw a screenshot of a terrorist pointing towards the viewer with a gun placed next to him. The *threatening/dynamic condition* contained sequences of propaganda videos mainly showing terrorists in threatening postures. Each fictive news report had a length of approximately one minute.

The levels of the factor *image*, namely *confidence-inspiring* and *threatening*, were chosen as divergent concepts based on their opposed effects on risk perception. Representative findings among the German population indicated that Chancellor Angela Merkel was considered to be the most popular and trustworthy politician in Germany during the time of the study conduction (forssa Gesellschaft für Sozialforschung und statistische Analyse mbH, 2009). An image of her as stimulus was expected to enhance participants' confidence that nothing would happen to them when facing threats like terrorism since the Chancellor was trusted to take care of such threats. Furthermore, it can be referred to the findings by Mittelstaedt, Riesz and Burns regarding the enhancement effect that a credible source may have on memory, as discussed in an earlier section of this study. Thus, the confidence-inspiring condition, based on the level of institutional trust and source credibility, should reduce anxiety and enhance memory and can therefore be opposed to fear and the consequential negative effects on cognitive processing.

Dependent measures. Affect. In order to measure the effect of the factors *image* and *delivery mode* on the affective responses, risk perception was assessed by asking the participants to indicate the extent to which they were *tensed (angespannt)*, *worried (besorgt)*, *nervous (nervös)*, *anxious (verängstigt)*, and *scared (erschrocken)* firstly after watching the news report, secondly when thinking of the possibility of a terrorist attack in Germany, thirdly when thinking about a terrorist attack in their own city and fourthly when thinking about the consequences of a terrorist attack. This was measured on a 5-point Likert-scale ranging from *not at all (überhaupt nicht)* to *very much (sehr stark)*. Thus, the higher the score, the higher the levels of negative affect. The scale was highly reliable ($\alpha = 0.89$). In order to make

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participants pay attention when indicating their state of mind, positively formulated adjectives were additionally included so that random answers could be controlled for.

Information processing and cognitive functioning. In order to assess the manipulation effect on information processing, five multiple-choice questions referring to the information given in the news report, were posed. For further analysis, the correct answer was described with the value 1 and wrong answers with the value 0. These values were summed up so that a high score indicated a good performance on this task while low scores indicated a poorer performance. *Cognitive functioning* was measured by means of three mathematical exercises with emphasis on the basic mathematical rules regarding the order of how to solve an equation. According to Hamilton (1975) this kind of cognitive testing is appropriate. The analysis was conducted in the same way as described for information processing.

Additional measures. As has been elaborated in the beginning, there are several supplemental factors which have been associated with risk perception and cognitive processing of information and could therefore have confounding effects. This makes it worth it to assess their effect on affect in this study. In order to measure the *perceived importance* of the topic terrorism, which was found to be of importance regarding the memorization of information, three items ($\alpha = 0.79$) were included. Based on a 5-point Likert-scale, ranging from *extremely inaccurate (sehr unzutreffend)* to *extremely accurate (sehr zutreffend)* with the option *neither accurate nor inaccurate (weder zutreffend noch unzutreffend)* in the center, participants were asked to indicate the extent to which they personally considered the topic terrorism to be important, relevant, and interesting, respectively. Since those items had to be answered previously to the manipulation, it was necessary to avoid priming effects. This was achieved by including additional items of the kind just described, which dealt with other alleged risks such as genetically modified food or the use of nuclear power. *Personal relevance* was measured by one item (Do you personally feel that the threats in the news report could pertain your city? – Hast du persönlich das Gefühl, dass die Drohungen im Nachrichtenbeitrag auf deine Stadt zutreffen könnten?) to control how personally involved and affected the respondent felt regarding the terrorist threat against German cities. The 5-point Likert-scale ranged from *not at all (überhaupt nicht)* to *very much (sehr stark)*. To assess *perceived self-efficacy*, participants were asked to indicate to what extent they felt capable of protecting themselves and friends and family, respectively, in case of a terrorist

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attack and to what extent they felt capable of taking precautions. The scale had a good reliability ($\alpha = 0.78$). Participants indicated the extent by means of a 5-point Likert-scale ranging from *not at all (überhaupt nicht)* to *very much (sehr stark)*. Four items were included in order to measure *institutional trust* towards the German government and Chancellor Merkel on a 5-point Likert-scale, ranging from *extremely inaccurate (sehr unzutreffend)* to *extremely accurate (sehr zutreffend)* with the option *neither accurate nor inaccurate (weder zutreffend noch unzutreffend)* in the center. The item scale was reliable ($\alpha = 0.71$). As mentioned above, those two latter concepts can have an effect on affect. Trustworthiness of the message source can, in combination with perceived expertise, positively influence memorization of the content. Beyond that, participants were asked to state how credible they perceived the news report to be, how much attention they paid when watching it, to what extent they were distracted by visual elements in the news report and to what extent they perceived the visual and audible content to be congruent. Those four items were considered to be important as basis for evaluating the manipulation effect. They were assessed through a 5-point Likert-scale ranging from *not at all (überhaupt nicht)* to *very much (sehr stark)*.

Results

Descriptives. More than half of the participants (59.4%) perceived the news report as moderately to very *credible*. In addition to that, 69% watched it with moderate to high *attention* which is in accordance with the findings that 61% were not or only a little distracted by certain *visual elements* they saw. However, only 31% indicated a positive perception of the *congruence* between visual and audible content. Thus, the items that were used to qualitatively evaluate the manipulation yielded good results. *Personal relevance* which measured the extent to which participants felt involved and personally addressed by the terrorist threats in the video, was found to be very low with 78.3% believing that the threats could apply only a little or not at all to their own city.

Next to the assessment of the manipulation effect on affect, additional variables were measured in association with affect in order to find possible confounding influences.

There is a highly significant positive correlation between *affect* and *perceived importance* of the topic terrorism ($r = 0.32, p < 0.01$). *Personal relevance* correlates with affect ($r = 0.38, p < 0.01$), as well and should therefore be used as a covariate ($F(4,97) = 17.87, p < 0.01$). *Media exposure* and affect were found to be positively related in terms of internet use for private purposes ($r = 0.23, p < 0.05$) while the relationship between affect and watching television is only marginally significant with $r = 0.16$ at $p < 0.1$. Internet has an effect as a covariate at the level $p < 0.05$ ($F(1,96) = 4.31$) while television only has a marginal effect as covariate ($F(1,96) = 3.14, p < 0.1$). Analyses indicate that affect is completely independent from the *number of inhabitants* ($r = -0.00, p \geq 0.05$) as well as from the presence of *big public buildings* in the own city ($r = -0.13, p \geq 0.05$). Neither the relationship between affect and *institutional trust*, nor the one between affect and *self-efficacy* is significant. The direction of correlation is, however, as expected, negative.

Testing the hypotheses. The hypothesis were all tested at a level of significance of $\alpha = 0.05$. Analysis of Variance was used for all tests, if not further specified.

Hypothesis 1. The first hypothesis concerned the effect that *confidence-inspiring* and *threatening* images have on affect, respectively. Based on analysis, no significant difference in affect between the *confidence-inspiring* and the *threatening* condition could be found

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($F(1,100) = 0.22$, n.s.). Testing this hypothesis also served as the manipulation check. It can be concluded that there is no significant difference caused by the factor *image* regarding the scores on the affective responses. This also implies that the affect manipulation did not work out which has to be taken into consideration when interpreting the remaining results. An explanation for the failure to find an effect could be that the within-group variance is considerably high ($SSE = 79.88$)¹. However, it should be mentioned that the scores on affect were lower in the two *confidence-inspiring* conditions than in the *threatening* conditions (see Table 1). Thus, a slight trend in the expected direction can be noted.

Hypothesis 2. The second hypothesis predicted that *dynamic images* do not differ from *static images* in their effect on the level of *affect* and that they facilitate effective *information processing*. As predicted, analysis indicated that *dynamic images* do not induce more negative *affect* than *static* picture do. Thus the first part of the hypothesis could be confirmed ($F(1,100) = 0.98$, n.s.). Even though one can infer from Table 1 that the mean score on *information processing* is slightly higher in the *dynamic* than in the *static* condition, this difference is far from being significant ($F(1,104) = 0.17$, n.s.). Thus, the assumption that *dynamic* images facilitate effective *information processing* has to be rejected. The *sub-hypothesis 2.1* proposed a facilitating effect of dynamic images on *cognitive functioning*. This effect was significant ($F(1,103) = 3.12$, $p < 0.05$).

Hypothesis 3. In hypothesis 3 it was assumed that *negative affect* inhibits effective *information processing* or *cognitive functioning*. Results based on linear regression analysis indicate that *affect* does not influence *information processing* ($F(1,100) = 2.34$, n.s.). However, a marginally significant negative correlation exists ($r = -0.15$) which suggests the presence of the tendency that the higher the level of negative affect, the poorer the performance on the processing tasks. A comparison between the mean scores of those with higher ($M = 0.74$) and those with lower *negative affect* ($M = 0.81$), provides support for this tendency. The small number of participants who indicated a high level of *negative affect* has to be considered ($n = 24$). *Affect* did not influence *cognitive functioning* significantly ($F(1,99) = 2.25$, n.s.).

¹ A high within-group variance reduces the power or probability to find potential effects of the experimental treatment

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Hypothesis 4. The fourth hypothesis proposed a significant mutual effect of *image* and *delivery mode*, in the sense that it is expected that the *threatening/static* condition yields a significantly poorer performance on *information processing* and *cognitive functioning* than the *confidence-inspiring/dynamic* condition. MANOVA analysis indicated that this hypothesis could not be confirmed ($F(3,95) = 0.99$, n.s.). However, it should be mentioned that a comparison of the mean scores of *cognitive functioning* between the two conditions shows a tendency as predicted, with higher scores in the *confidence-inspiring/dynamic* condition (see Table 1).

Table 1. Means of Affect, Processing and Functioning Across the Four Conditions

| | Affect ^a | Processing ^b | Functioning ^b |
|-------------------------------|---------------------|-------------------------|--------------------------|
| | Mean* (SD) | Mean* (SD) | Mean* (SD) |
| Confidence-inspiring/ Static | 2.11 (0.88) | 0.76 (0.19) | 0.65 (0.32) |
| Confidence-inspiring/ Dynamic | 2.42 (0.85) | 0.79 (0.17) | 0.84 (0.27) |
| Threatening/ Static | 2.33 (0.83) | 0.78 (0.17) | 0.72 (0.26) |
| Threatening/ Dynamic | 2.38 (1.01) | 0.78 (0.78) | 0.73 (0.26) |
| <i>Total mean</i> | <i>2.31</i> | <i>0.78</i> | <i>0.74</i> |

Note. $n = 106$

^aScales ranging from 1 to 5; higher scores indicate higher level of negative affect.

^bAnswers were recoded into 0 (false answer) and 1 (correct answer). The values represent the mean sum scores of correct and incorrect answers; higher scores indicate a higher rate of correct answers.

* n.s.

Discussion

The goal of the present study was to examine and to answer the question whether effective cognitive functioning and processing of the information, provided in the news, is possible when the presented information is accompanied by images of terrorist attacks, threats or propaganda. The basic assumption was that threatening images inhibit effective processing of the given information and that even general cognitive functioning is negatively affected. This effect would oppose the actual purpose of news reports- properly informing the public. It was further considered whether the delivery mode was of importance regarding information processing and cognitive functioning. Those considerations led to the formulation of the hypotheses. First it was proposed that the content of the images, thus threatening or confidence-inspiring, had an impact on participants' affect. In the present study, this hypothesis had to be rejected. Moreover, this entails the implication that the affect manipulation was not effective, which has to be kept in mind when interpreting further findings since no difference between the conditions could be found. Secondly, it was examined whether dynamic images facilitate effective cognitive functioning and information processing. The confirmed assumption that dynamic images do not evoke more negative feelings than static images, served as a basis for this hypothesis since less negative or more positive affect has been expected to facilitate processing. However, while the main effect of delivery mode was present on functioning, it could not be found on processing. Furthermore, it was a main goal to assess whether negative affect inhibited effective cognitive functioning and information processing. This expected effect could be tendentially confirmed as the two variables affect and processing correlate with each other. This is in accordance with the phenomenon of affective interference on which this hypothesis was based. However, future research, implementing a modified experimental design, has to be conducted to find even more conclusive results. Finally, an interaction effect of image and delivery mode was assumed with the threatening/static condition yielding a significantly poorer performance in information processing and functioning than the confidence-inspiring/dynamic condition. This assumption could not be accepted.

Thus, in order to answer the central question of this study, it has to be concluded that negative affect, although most probably not induced by either the content of the image or the delivery mode, inhibits effective information processing. This effect was not true for

News coverage on terrorism- The influence of affect-laden images on information processing cognitive functioning which, in contrast to processing, seems to depend on the delivery mode of the images. However, the question if news reports should or should not be supported by images depicting threatening terrorists or the consequences of attacks cannot be answered in this study due to the missing manipulation effect. Therefore, it seems reasonable to look at those variables that could have had a confounding affect on the affective responses which were indicated to be rather positive than negative.

As the present study findings indicate, affect seems to strongly depend on the perceived relevance of the topic. It has been elaborated above that this can either be a direct or an indirect effect via involvement. However, since the perceived importance of terrorism was relatively high, it cannot be assumed that the low scores on affect were due to the low level of involvement. Taking the low level of awareness regarding the topic into consideration, it could be carefully presumed that this is an indicator for low perceived relevance and therefore for low levels of involvement. In the present study, neither institutional trust nor self-efficacy could be considered to be determining factors regarding the affective responses. This stands in contrast to what has been expected, but could be explained by the low to moderate scores on the two factors. Media exposure seems to have a positively directed effect on the level of affect, especially regarding the use of the internet, which could imply that the more people use the internet, the more likely they are exposed to threatening images on a daily basis and the more anxious they feel. Since respondents indicated to use the internet for only 1-3 hours per day on average, this proportional relationship could explain the low scores on affect. However, this surprising direction of the relationship goes beyond the scope of this study and requires further examination in future research. Objective vulnerability which was high across the sample but was found to be completely irrelevant regarding the dependent variable affect. This difference between objective and perceived vulnerability was also supported by the findings that most participants did not personally feel affected by the threats posed against German cities even though the majority lived in big cities with big public buildings. Since previous studies found that the factor perceived personal relevance seems to be even superior to stylistic factors of the message, it might have significantly decreased the impact of the explanatory factors, image and delivery mode.

Despite the generally successful implementation of the study and the gained results, there is still room for improvement. The finding that the affect manipulation was ineffective could also be accounted for by the indifferent attitude towards Chancellor Merkel and her

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government across the sample. This would be opposed to the highly favorable opinions of the German population as has been predicted in survey research. Since this was the basis to choose Chancellor Merkel as stimulus, it was expected that seeing an image of her should inspire confidence. Taking the low scores on institutional trust into consideration, it becomes obvious that this could not be achieved. In terms of future research this would have to be controlled for in advance by means of a quantitative pilot study next to a qualitative pilot study. Participants indicated that the perceived congruence of the presented images and the audible information was relatively low. However, due to the application of a comment box at the end, it could be inferred that this was partly based on a different interpretation of the word *news report* (*Nachrichtenbeitrag*). Some participants associated exclusively dynamic images belonging to the style of a news report, while the author's association included static images, as well. In the future, such misunderstandings could be prevented by applying an even more extensive qualitative pilot study with a larger sample size. Moreover, in future research, the influence of high within-group variance should be avoided through, for example, an increase in sample size. The small sample size of the present study can be assumed to affect the external validity of the findings, the more so when considering that the sample consisted of students only. A homogenous sample is useful for being able to ascribe effects on dependent variables to the treatment, but decreases the representativeness regarding the general population.

The results provide valuable implications for the choice of visual material in news reports. Even though the direct effect of threatening images on affect could not be demonstrated in this study, other findings yielded relevant indications. Since dynamic images such as videos did not seem to have a facilitating effect on information processing in the context of terrorist topics and negative affect was found to inhibit this kind of processing, the question should be if news reports should completely refrain from videos that contain new threats and propaganda or consequences of terrorist attacks. Future research should further try to find out whether replacing those threatening images with confidence-inspiring, positive images, could be beneficial in the sense that they led to less negative affect among the viewers. This might of course reduce the level of attracted attention via negative arousal, but would promote the achievement of the central goal of any serious news program- to inform the public in a reliable way. This includes stopping to promote "free propaganda" which terrorists aim at, next to the diffusion of fear in the society. Following the role-model of

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several British and American stations which ascribed themselves to the commitment not to present any of the material as described above, would be a reasonable step. This is necessary for German television stations, but mostly for information providers on the highly frequented internet, where videos of terrorism are constantly presented in online news reports and online newspapers.

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APPENDIX

I. Text (news report).

Berlin. Ein neues Terrorvideo ist Ende letzter Woche im Internet aufgetaucht. Das 24-minuetige Video enthaelt konkrete Drohungen gegen eine Anzahl deutscher Staedte und wird von Sicherheitsbehoerden als authentisch beurteilt. Wie der Sprecher der Bundesanwaltschaft, Rolf Meltfeld, gestern morgen mitteilte, werden die Aussagen der Terroristen sehr ernst genommen. Nach Angaben des Bundeskriminalamtes wird davon ausgegangen, dass das Video vermutlich mit dem Einsatz deutscher Friedenstruppen in Afghanistan im Zusammenhang steht. Zugeschrieben wird es der militanten Untergrundorganisation Islamische Dschihad Union (IJU), wobei es sich, ersten Auswertungen zufolge, bei dem, teilweise verummumten, Sprecher wohl um einen Deutschen aus dem Raum Karlsruhe handelt. Das BKA begruetet diese Annahme mit der Analyse der zahlreichen Textpassagen, in denen in fliessendem Deutsch mit Anschlaegen auf Deutschland gedroht wird. Die genaue Herkunft und Bedeutung der IJU ist in Sicherheitskreisen umstritten. Es wird allerdings angenommen, dass die militante Untergrundorganisation mit al-Qaida in Verbindung steht. Des Weiteren wird davon ausgegangen, dass der Entstehungszeitpunkt des Videos einige Wochen zurueck liegt, da kein konkreter Bezug auf die aktuelle politische Lage genommen wird.

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II. Questionnaire.

Hallo!

Vielen Dank, dass du dich bereit erklärt hast, einen Beitrag zu meiner Bachelorarbeit zu leisten. Durch diese Untersuchung möchte ich mehr über Meinungen zu aktuellen Themen in der Gesellschaft herausfinden.

Um später aufgrund deiner Angaben aussagekräftige Schlüsse ziehen zu können, ist es sehr wichtig, dass du den Fragebogen gewissenhaft ausfüllst und nicht mit anderen über Form oder Inhalt der Untersuchung redest. Die Umfrage dauert etwa 10 Minuten. Alle Daten werden natürlich komplett anonym ausgewertet. Bitte nimm dir Zeit und vor allem Ruhe, während du mitmachst. Du benötigst Lautsprecher oder Kopfhörer für einen Teil der Untersuchung. Du wirst davor aber noch einmal darauf hingewiesen.

Bevor du beginnst, möchte ich noch einmal betonen, dass es vor allem um deine Meinung geht und es keine richtigen oder falschen Antworten gibt. Sollte Letzteres doch einmal der Fall sein, wirst du auch darauf hingewiesen.

Wenn du jetzt auf "Next" klickst, kannst du mit dem Fragebogen beginnen. Viel Spaß!

Zunächst benötige ich ein paar allgemeine Angaben von dir.

Wie alt bist du?

Gib bitte dein Geschlecht an.

- männlich
 weiblich

Wie viele Einwohner leben insgesamt in der Stadt, in der du zur Zeit wohnst?

- weniger als 100.000
 100.000 – 500.000
 500.000 – 1 Million
 mehr als 1 Million

Gibt es große öffentliche Gebäude oder Orte in deiner Stadt (z.B. Stadien, Konzerthallen, Hauptbahnhof...)?

- ja
 nein

Welchen beruflichen Status hast du?

- Schüler
 Student
 Auszubildender
 Berufstätig
 Arbeitsuchend
 Sonstiges

...nämlich:

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Nun folgen einige Fragen bezüglich deines Mediengebrauchs. Bitte kreuze hier und im weiteren Verlauf des Fragebogens immer nur die zutreffendste Antwort an (d.h. pro Frage ist immer nur eine Antwort möglich):

Wie viele Stunden am Tag siehst du durchschnittlich fern?

- 0-1
 1-3
 3-6
 mehr als 6

Wie viele Stunden am Tag verbringst du für private Zwecke im Internet?

- 0-1
 1-3
 3-6
 mehr als 6

Was ist der Hauptgrund dafür, dass du fernsiehst?

- um mich zu entspannen
 um unterhalten zu werden
 um Informationen zu erhalten
 anderer Grund

...nämlich

Was ist der Hauptgrund dafür, dass du das Internet für private Zwecke benutzt?

- um mich zu entspannen
 um unterhalten zu werden
 um Informationen zu erhalten
 anderer Grund

...nämlich

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Stelle dir jetzt bitte die folgenden Situationen vor und kreuze jeweils den Punkt in der Skala an, der am Besten zutrifft.

| | Nie | Selten | Manchmal | Oft | Immer |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| „Wenn ich mir eine Telefonnummer merken soll, stelle ich sie mir bildlich vor“ | <input type="radio"/> |
| „Wenn ich eine Geschichte lese, sehe ich vor meinem geistigen Auge die beschriebene Situation oder die beschriebenen Figuren“ | <input type="radio"/> |

Wie sehr stimmst du der folgenden Aussage zu?

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|--|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Kanzlerin Angela Merkel und die Bundesregierung sind auf die Sicherheit und Gesundheit der deutschen Bevölkerung bedacht | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Bitte kreuze jetzt jeweils den Punkt in der Skala an, der im Allgemeinen deine Meinung zu den unten angegebenen Themen am Besten widerspiegelt:

Ich persönlich finde das Thema "Amoklauf in öffentlichen Einrichtungen (z.B. Schulen oder Universitäten)"...

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|-------------|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Wichtig | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Relevant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interessant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Ich persönlich finde das Thema "Flugsicherheit"...

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|-------------|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Wichtig | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Relevant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interessant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Ich persönlich finde das Thema "genmanipulierte Nahrung"...

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|-------------|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Wichtig | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Relevant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interessant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Ich persönlich finde das Thema "Terrorismus"...

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|-------------|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Wichtig | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Relevant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interessant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Ich persönlich finde das Thema "Atomenergie"...

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|-------------|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Wichtig | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Relevant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interessant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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Bitte kreuze nun die Antwort an, die am Ehesten auf dich zutrifft. Auch hier ist wieder nur eine Antwort möglich:

Wie oft denkst du über das Risiko von Amokläufen in öffentlichen Einrichtungen (z.B. Schulen oder Universitäten) in Deutschland nach?

- täglich
 1-2 mal die Woche
 1-2 mal im Monat
 seltener
 nie

Wie oft denkst du über das Risiko von Fehlern in der deutschen Flugsicherheit nach?

- täglich
 1-2 mal die Woche
 1-2 mal im Monat
 seltener als 1-2 mal im Monat
 nie

Wie oft denkst du über das Risiko von genmanipulierter Nahrung in Deutschland nach?

- täglich
 1-2 mal die Woche
 1-2 mal im Monat
 seltener als 1-2 mal im Monat
 nie

Wie oft denkst du über das Risiko von terroristischen Anschlägen in Deutschland nach?

- täglich
 1-2 mal die Woche
 1-2 mal im Monat
 seltener als 1-2 mal im Monat
 nie

Wie oft denkst du über das Risiko durch die Nutzung von Atomenergie in Deutschland nach?

- täglich
 1-2 mal die Woche
 1-2 mal im Monat
 seltener als 1-2 mal im Monat
 nie

News coverage on terrorism- The influence of affect-laden images on information processing

Du siehst jetzt einen Ausschnitt aus einem aktuellen Nachrichtenbeitrag zu einem der gerade genannten Themen. Der Beitrag dauert etwa eine Minute. Danach folgen noch ein paar Fragen.

Du benötigst hier Lautsprecher oder Kopfhörer, um dem Beitrag folgen zu können. Bitte überprüfe erst, ob sie angeschaltet sind.

Um den Bericht ansehen zu können, folge einfach den unten genannten Schritten. Sobald der Nachrichtenbericht beendet ist, kannst du den neu geöffneten Tab schließen und den Fragebogen weiter ausfüllen, indem du dann auf "Next" klickst.

1. Kopiere den Link:

(dafür linke Maustaste gedrückt halten, über den Link fahren, Rechtsklick -> Kopieren)

2. 'Datei' (oben links im Internet Explorer & Firefox) -> 'Neuer Tab' -> Link einfügen in Adressleiste (Rechtsklick -> 'Einfügen')

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Jetzt folgen ein paar weitere Fragen. Bitte kreuze den Punkt in der Skala an, der am Besten angibt, wie sehr dein aktueller Gemütszustand mit dem jeweiligen Adjektiv übereinstimmt:

Nachdem ich den Nachrichtenbeitrag gesehen habe, fühle ich mich....

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Angepannt | <input type="radio"/> |
| Besorgt | <input type="radio"/> |
| Ruhig | <input type="radio"/> |
| Nervös | <input type="radio"/> |
| Sicher | <input type="radio"/> |
| Verängstigt | <input type="radio"/> |
| Zuversichtlich | <input type="radio"/> |
| Erschrocken | <input type="radio"/> |

Wenn ich in diesem Moment an die Möglichkeit eines Terroranschlags in Deutschland denke, fühle ich mich...

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Angepannt | <input type="radio"/> |
| Besorgt | <input type="radio"/> |
| Ruhig | <input type="radio"/> |
| Nervös | <input type="radio"/> |
| Sicher | <input type="radio"/> |
| Verängstigt | <input type="radio"/> |
| Zuversichtlich | <input type="radio"/> |
| Erschrocken | <input type="radio"/> |

Wenn ich in diesem Moment an die Möglichkeit eines Terroranschlags in meiner eigenen Stadt denke, fühle ich mich...

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Angepannt | <input type="radio"/> |
| Besorgt | <input type="radio"/> |
| Ruhig | <input type="radio"/> |
| Nervös | <input type="radio"/> |
| Sicher | <input type="radio"/> |
| Verängstigt | <input type="radio"/> |
| Zuversichtlich | <input type="radio"/> |
| Erschrocken | <input type="radio"/> |

Wenn ich in diesem Moment an die Konsequenzen eines Terroranschlags denke, fühle ich mich...

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Angepannt | <input type="radio"/> |
| Besorgt | <input type="radio"/> |
| Ruhig | <input type="radio"/> |
| Nervös | <input type="radio"/> |
| Sicher | <input type="radio"/> |
| Verängstigt | <input type="radio"/> |
| Zuversichtlich | <input type="radio"/> |
| Erschrocken | <input type="radio"/> |

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Jetzt folgt ein kurzes Quiz, durch das ich herausfinden möchte an wie viele Informationen aus dem Nachrichtenbeitrag du dich erinnern kannst. Danach folgen noch drei kurze Aufgaben, die du korrekt lösen sollst. Es geht nun also NICHT um deine Meinung, sondern darum richtige Antworten zu geben.

Wie heißt der Pressesprecher der Bundesanwaltschaft?

- Ralf Jansen
 Rolf Meltfeld
 Johan Gerstler
 Michael Kaufmann

Woher kommt der Sprecher in dem Terrorvideo vermutlich?

- aus dem Raum Hannover
 aus dem Raum Kaiserslautern
 aus dem Raum Berlin
 aus dem Raum Karlsruhe

Mit welchem Ereignis wird das Terrorvideo in Verbindung gebracht?

- Verhaftung eines militanten usbekischen Führers
 Einsatz deutscher Friedenstruppen in Afghanistan
 Festlegung neuer Gesetze im Irak
 Umstrittene Rede eines deutschen Regierungsmitglieds

Wer oder was wird durch den Terroristen im Video direkt bedroht?

- Das Reichstagsgebäude
 Der öffentliche Nahverkehr
 Der Außenminister
 Eine Anzahl deutscher Städte

Wie schätzen deutsche Sicherheitsbehörden die Drohungen durch die Terroristen ein?

- Die Regierung ist gut vorbereitet, mit solchen Bedrohungen umzugehen
 Die Bedrohung ist kontrollierbar
 Die Drohungen kommen von einer vollkommen unbekanntem Organisation
 Die Drohungen werden sehr ernst genommen

Bitte löse die drei mathematischen Aufgaben so schnell wie möglich in deinem Kopf (!) und schreibe das jeweilige Ergebnis in das zugehörige Lösungskästchen.

$7 \cdot (2 + 2 \cdot 3) =$

$(9 - 3)^2 \cdot 2 + \sqrt{25} =$

$-14 \cdot 2 - (-35) =$

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Nun geht es um wieder deine Meinung und zwar zu dem Nachrichtenbericht, den du gerade gesehen hast. Bitte kreuze den Punkt in der Skala an, der am Besten deine Meinung widerspiegelt:

Hast du persönlich das Gefühl, dass die Drohung im Nachrichtenbericht auf deine Stadt zutreffen könnte?

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| - | <input type="radio"/> |

Ich persönlich habe das Gefühl, dass...

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ...der gesprochene Text und die gezeigten Bilder gut aufeinander abgestimmt waren | <input type="radio"/> |
| ... der Nachrichtenbeitrag glaubwürdig war | <input type="radio"/> |
| ... mich einige visuelle Elemente in dem Nachrichtenbeitrag von dem gesprochenen Text abgelenkt haben | <input type="radio"/> |
| ... ich den Nachrichtenbeitrag aufmerksam geguckt habe | <input type="radio"/> |

Beinahe fertig! Gib nun bitte noch an, wie sehr die folgenden Aussagen auf dich zutreffen.

| | Überhaupt nicht | Ein bißchen | Einigermaßen | Ziemlich | Sehr stark |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Ich fühle mich in der Lage, dass ich mich im Falle eines Terroranschlags schützen kann | <input type="radio"/> |
| Ich fühle mich in der Lage, dass ich meine Familie und Freunde im Falle eines Terroranschlags beschützen kann | <input type="radio"/> |
| Ich fühle mich in der Lage, dass ich Vorsichtsmaßnahmen treffen kann, so dass ich nicht direkt durch einen Terroranschlag getroffen werde (z.B. öffentliche Plätze meiden, sehr wachsam sein, ...) | <input type="radio"/> |

Gib zum Schluss bitte an, wie sehr du den folgenden drei Aussagen zustimmst.

| | Sehr unzutreffend | Unzutreffend | Weder zutreffend noch unzutreffend | Zutreffend | Sehr zutreffend |
|--|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Kanzlerin Angela Merkel und die Bundesregierung reden offen über das Risiko eines Terroranschlags in Deutschland | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Kanzlerin Angela Merkel und die Bundesregierung beschützen Menschen wie mich vor dem Risiko eines Terroranschlags | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Wenn Kanzlerin Angela Merkel und die Bundesregierung sagen, dass sie alles tun, um das Risiko eines Terroranschlags für mich als Bürger zu verringern, dann glaube ich das | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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Vielen vielen Dank für deine Zeit und deine Mühe! Du hast mir wirklich sehr geholfen! Wenn du erfahren möchtest, was bei meiner Untersuchung herausgekommen ist, schreib bitte deine Emailadresse in das Kästchen! Falls du noch Anmerkungen zu Form oder Inhalt des Fragebogens hast, kannst du gerne- natürlich anonym- etwas in das Kommentarkästchen schreiben.

Emailadresse

Kommentar

(End of questionnaire)

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