Dramatic and extraordinary real-world events have the power to impact on public opinion and to cause shifts in public attitudes (e.g. Sorrentino & Vidmar, 1974). The effect has been shown to apply to nuclear power accidents (De Boer & Catsburg, 1988; Van der Brug, 2001), to accidents involving loss of life (Lever, 1969; see also Slovic, Lichtenstein, & Fischhoff 1984), to assassinations of important social or political figures such as John F. Kennedy (Sicinski, 1969) or Martin Luther King (Hofstetter, 1969; Meyer, 1969) and to terrorist attacks (Noelle-Neumann, 2002; Traugott et al., 2002). Generally, however, studies of the impact of real-world events on public opinion are rare since the incidents most times occur too quickly to collect baseline data (Sorrentino & Vidmar, 1974).

An understudied aspect of public reactions to dramatic events relates to the role of the media. Some previous studies acknowledge the importance of media coverage in transmitting crisis events to the public (e.g. Lewis, 2000, p. 203; Traugott et al., 2002, p. 512); however, most do not empirically assess the role of the media, neither in the short-term nor in the long-term perspective (for an exception see Brosius & Kepplinger, 1990). By and large, the public does not experience dramatic events directly, but information is relayed through interpersonal communication or the mass media (e.g. Mutz, 1998). Accordingly, we contend that studies about direct and immediate effects of events could be deceptive, since they do not consider information sources about the event. The present study addresses these limitations drawing on a quasi-experimental survey design including a panel component collected around an event that shook a country.

On November 2, 2004, the Netherlands was struck by what was felt to be an attack on free-speech and civil liberties. Theo van Gogh, a controversial film-maker and columnist was assassinated in Amsterdam in open daylight. He had become widely known as an outspoken critic of Islam in relation to the release of the movie Submission, a sarcastic pamphlet against the role of women in Muslim society, written by Ayaan Hirsi Ali, a well-known Islam-critic and then an MP for the center-right
The assassination of van Gogh happened in a time of ongoing intense public and political debate about the integration of Muslim minorities in the Netherlands. This dramatic incident was followed by a series of attacks on Muslim institutions and allegedly caused a period of increased anti-Muslim sentiment. The present study considers whether the assassination of van Gogh had effects on anti-immigration attitudes in general, with special focus on the role of the media. Further, we look at the persistence of the mediated effects of the assassination and the degree to which the content of media coverage was related to dynamic developments.

PREVIOUS STUDIES ON THE IMPACT OF CRISIS EVENTS

Crisis Events and Public Opinion Dynamics

Previous studies demonstrated impacts of crisis events on public opinion. Huddy, Khatib, and Capelos (2002) found that the 9/11 attacks in the United States had a negative effect on Americans’ feeling of security and boosted their perceived risk of future terrorist attacks (see also Bechtel, 2003). Similarly, Huddy, Feldman, Lahav, and Taber (2003) argue that Americans showed higher levels of fear/anxiety, depression, and risk appraisal after 9/11. By comparing survey results from before and after 9/11 in Germany, Noelle-Neumann (2002) concludes that ‘anything that can potentially cause fear has tended to become virulent in Germany following the terrorist attacks in the United States’ (p. 95; for conflicting arguments, see Lewis, 2000). Concerning assassinations of important political or social figures—as in the present study—fewer studies provide evidence for an impact on public opinion. Hofstetter (1969) shows that the assassination of Martin Luther King affected the political disengagement of African Americans. Meyer (1969), concerning the same crisis event, finds positive effects on racial protest thinking among all Americans. Sicinski (1969) looks at the impact of the assassination of J. F. Kennedy on Polish public opinion and shows that opinions concerning Kennedy changed and interest in international politics increased immediately after the murder.

Why do events such as 9/11 or the assassination of van Gogh relate to anti-immigration sentiment? Terrorist attacks manifest themselves in the minds of people as a threat to personal and national security. It has been shown that threat perceptions in general contribute to the development of prejudice, increase ethnocentrism and xenophobia (LeVine & Campbell, 1972; Struch & Schwartz, 1989; Schimmel et al., 1999), and promote intolerance and a reliance on stereotypes (Doty, Peterson, & Winter, 1991; Bodenhausen, Sheppard, & Kramer, 1994). Noelle-Neumann (2002) shows that, in line with this argument, Germans’ fear to be overrun with foreigners rose by more than 15 percentage points after the 9/11 attacks. Also in
the United States, Arab and Muslim ethnic minority groups received generally less favorable assessments post-9/11 (Traugott et al., 2002, p. 514). We, consequently, expect the assassination of van Gogh to cause an increase in anti-immigration sentiment.

**MEDIATING CRISIS EVENTS—THE ROLE OF THE MEDIA**

The vast majority of the population has not witnessed van Gogh’s assassination directly, and therefore received information about the event either from the mass media or from interpersonal communication. Studies on news diffusion show that the spread of information about a key event depends on characteristics of the event, the media system and individuals (see Rosengren, 1987, for an overview). The importance of an event plays a major role for quick diffusion, and the more important an event is, the less significant individual characteristics are for learning about it (Rosengren, 1987, p. 230). Moreover, with increasing importance of an event, personal communication is of higher significance for diffusion of information about it (Rosengren, 1973; De Fleur, 1987). A study on diffusion of news about the assassination of Rabin in Israel, however, showed that the majority of people had heard about it on radio or television (Cohen, 2002), which is partly ascribed to developments in media technology, making electronic media coverage more immediate and intense.

It has long been recognized that a real-world event can differ from its representation in the media (e.g. Lang & Lang, 1953; Noelle-Neumann & Mathes, 1987) and that media, especially after a disaster, tend to operate in a ‘media hype mode’, a reinforcing self-referential system of extensive and amplified coverage of the event (e.g. Kepplinger, Brosius, & Staab, 1991; Kepplinger & Habermeier, 1995; Vasterman, Yzermans, & Dirkzwager, 2005). We deal with an event in which the victim died, the identity of the perpetrator is Arab/Muslim, and responsibility for the action is clearly taken, suggesting that van Gogh’s assassination created a vast amount of media coverage (Weimann & Brosius, 1991). The murder of van Gogh indeed caused a peak in attention for news that connected topics of Islam, terrorism, and immigration issues (Van Atteveldt, Ruigrok, & Kleinnijenhuis, 2006).

Extraordinary attention peaks can cause changes in public attitudes not only in the immediate short term, but also for a prolonged period of time after the reporting peak has vanished (for more on the echo-effect, see Brosius & Kepplinger, 1990, 1992). Concerning the 9/11 attacks it was shown that exposure to television news significantly boosted levels of fear/anxiety, feelings of depression, and risk appraisal1 (Huddy et al., 2003). Craft and Wanta (2004) find weak second-order agenda setting effects of the post-9/11 coverage on public concerns. Traugott et al. (2002) demonstrate that high news exposure after the 9/11 attacks was related to more favorable in-group assessments. Media coverage of Rabin’s assassination distressed

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1The authors, however, merely speculate about the content of the (news) media people were exposed to. They claim that it is the ‘replaying of images from a terrorist event [that] serves to heighten public fear and anxiety’ (Huddy et al., p. 256).
a significant part of survey respondents (Cohen, 2002) and exposure to news about van Gogh’s assassination was related to higher levels of fear, worry, anger, and sadness among young children (Buijzen, Walma van der Molen, & Sondij, 2007).

In the van Gogh case, the media coverage was different before and after the assassination. Uitermark and Hajer (2005) also note that the reporting immediately after the assassination on that issue and related ones was intense and attracted major journalistic attention. Examples of headlines of national newspapers illustrate the rather fright-inducing coverage, such as ‘Hatred and anxiety in Amsterdam’, ‘Searching the link with Al Qaeda—suspect of murder van Gogh is Mohammed B’, ‘Holy war in Holland’, ‘Moroccans spit on image of van Gogh’, and the Minister of Finance Gerrit Zalm announcing: ‘We are at war’.2 The Dutch writer and commentator Geert Mak describes the situation as follows: ‘In the Netherlands the media opened the gates and hatred against foreigners that was hidden for so long […] suddenly splashed outside’ (Mak, 2005, p. 11).3

However, following the immediate post-event coverage the ‘debate in the Netherlands contained many deescalating tendencies’, and rather than focusing blame on immigrants there ‘was a marked rise in the appreciation of several structural problems that face migrants in the Netherlands’ (Uitermark & Hajes, 2005, p. 21). The coverage related to socio-economic circumstances of immigrants and reasons other than religion or cultural clashes for problems of integration of Muslim minorities. This is in line with Nacos and Torres-Reyna (2003), who show that ‘there was a shift from a fairly limited and stereotypical coverage [of Muslims] in the pre-9/11 period to a more comprehensive, inclusive, and less stereotypical news presentation’ (p. 151; see also Gartner, 2004). Framing effects studies show that certain characteristics of an issue that are emphasized in the news can cause the public to consider these characteristics in their opinion about the issue (Nelson, Oxley, & Clawson, 1997; Scheufele, 1999; De Vreese, 2004). This leads us to expect that in the direct aftermath of the assassination high attention to news media should lead to higher levels of anti-immigration sentiment, whereas a possible decrease in anti-immigration attitudes weeks after the murder should again be positively related to media exposure.

**HYPOTHESES**

In sum, the following hypotheses are formulated taking into account the above considerations

H1: The crisis event triggers an increase in anti-immigration sentiments.

H2: News exposure moderates the impact of the crisis event on anti-immigration sentiments in the immediate aftermath of the event, with high news exposure leading to more negative evaluations.

H3: Higher news exposure is related to a long-term decrease in anti-immigration sentiment.

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2 In order of citation: de Volkskrant, November 4, 2004, p. 3; Algemeen Dagblad, November 4, 2004, p. 1; Algemeen Dagblad, November 6, 2004, p. 19; De Telegraaf, November 4, 2004, p. 3; Algemeen Dagblad, November 6, 2004, p. 1. All headlines are translations by the authors.

3 Translation by authors.
METHOD

OVERVIEW
To investigate the claims at hand we draw upon a quasi-experimental survey data collection with a panel component. The online survey was originally designed as first part of a larger study of Dutch public opinion about European integration and the role of the media and immigration attitudes and used undergraduate students as respondents. The survey was fielded from October 26 to November 9, 2004, with the assassination of van Gogh falling right in the middle of the fieldwork period. Thereby we have a ‘control group’ (respondents participating in the survey prior to the assassination) and an ‘experimental group’ (respondents who filled in the survey in the days following the murder). We approached all respondents (pre- and post-assassination group) again about 4 weeks after their initial participation in the survey. This part of the data collection serves as panel component.

RESPONDENTS
A total of 276 Dutch undergraduate students of the social science faculty at the University of Amsterdam took part in the first wave of the survey (63 percent female, average age of $M = 20.1$). They were drawn from an e-mail address database of students who had consented to serve as research participants. A participation incentive (a lottery for three CD vouchers) was used. The response rate for the first wave, computed according to AAPOR definition Response Rate 1, was 0.61. All respondents were invited about 4 weeks later to fill in a follow-up survey, which was completed by 123 respondents, a response rate of 0.45. In the remainder, we label the different groups as follows: respondents who completed the survey prior to the assassination are group $t_1.pre$ ($n = 128$); respondents who filled it out after the murder are group $t_1.post$ ($n = 148$); respondents of $t_1.pre$ who completed the follow-up survey are in group $t_2.pre$ ($n = 54$); and respondents from $t_1.post$ who completed the second wave are group $t_2.post$ ($n = 69$). The ‘experimental manipulation’ in the quasi-experimental design is the assassination of van Gogh in the morning of November 2.⁴

MEASURES
The dependent measure is a list of statements concerning attitudes toward immigrants and immigration assessed on a 5-point agree-disagree scale. The wording of the statements was (i) Immigration is good for the job market, (ii) The children of immigrants cause problems in schools, (iii) Immigration contributes positively to Dutch culture, (iv) Immigrants abuse the welfare system, (v) The religious practices of immigrants threaten the Dutch way of life, and (vi) Immigrants are a threat to security. The items tap personal attributes as well as responsibility for social problems

⁴Since we utilized a quasi-experimental design in which participants were not assigned to the experimental and control group at random, we compared the groups along demographic characteristics. Groups $t_1.pre$ and $t_1.post$ do not differ significantly in terms of age, gender, and their ideological leaning. For political interest we report a weakly significantly higher political interest in group $t_1.post$ (not shown). For groups $t_2.pre$ and $t_2.post$ we found no significant differences in age, gender, ideology and political interest. We, furthermore, found groups $t_1.pre$ and $t_2.pre$ as well as $t_1.post$ and $t_2.post$ to be highly similar in terms of age, gender, ideology and political interest. All relevant variables have been measured at $t_1$ only.
(Sniderman, Peri, de Figueiredo, & Piazza, 2000). The items, measured in both waves and recoded when appropriate, form an index of anti-immigration sentiment, $t_1 M = 2.90, SD = 0.80, \alpha = .81; t_2 M = 2.73, SD = 0.78, \alpha = .85$. After initial analyses we used those items that pertain directly to perceptions of threat of immigrants to security [items (v) and (vi)] to form a threat index, $t_1 M = 2.71, SD = 1.08, \alpha = .79; t_2 M = 2.59, SD = 1.02, \alpha = .84$.

To consider a moderating effect of consumption of news media, we use a measure of exposure to television news (public and commercial broadcasting) and to national newspapers, including quality and sensational/free papers (de Volkskrant, de Telegraaf, Het Algemeen Dagblad, and Metro/Spits). Respondents reported how many days in an average week they watch one of the television newscasts (ranging from 0 to 7) and read one of the different newspapers (ranging from 0 to 6). Combining the measures by adding up days of exposure and dividing by number of outlets results in a scale of total news consumption ranging from 0 to 6.3 ($M = 2.86; SD = 0.82$). The sample was split at the mean into groups with high and low news consumption.

**ANALYSIS**

To assess the impact of van Gogh’s assassination on attitude differences between $t_1$.pre and $t_1$.post we rely on a straightforward independent sample $t$-test. The same strategy is pursued to look at the possible moderating effect of television and at over-time differences. We report one-sided $t$-test significance values throughout, since our hypotheses include expectations concerning the direction of the differences. Last, we assess the influence of news consumption on attitude change from $t_1$ to $t_2$ by means of an OLS regression model.

**RESULTS**

Did the assassination of van Gogh have an effect on respondents’ anti-immigration attitudes? We first look at the mean differences of the individual anti-immigration measures and the combined index of all six items as shown in Figure 1.

Although the mean for the anti-immigration index is higher for the post-assassination group $t_1$.post than for $t_1$.pre, this difference is not significant. Also, for four out of the six items we do not find significant differences; the means for these in $t_1$.pre and $t_1$.post hardly differ at all. Results concerning the two items that directly relate to the real-world incident (items 5 and 6) are striking however. As compared to the pre-assassination group, respondents in the post-assassination group agreed markedly more with the statements that immigrants’ religious practices threatened the Dutch way of life, $t (274) = -3.21, p < .001$, and that immigrants were a security threat, $t (274) = -1.80, p < .05$. For further analysis we rely on these two items that together form the threat index. We find a significant between-group difference for the index of those two items concerning issues of security and religious fundamentalism, $t (274) = -2.80, p < .01$.5

5We also looked at variation in what respondents consider the most important problem facing the country at the moment. Respondents naming immigration or integration of minorities as most important problem were recoded 1, all other respondents 0. We find a significant mean difference between $t_1$.pre ($M = 0.129$) and $t_1$.post ($M = .286$), $F (1, 443) = 17.66, p < .001, \eta^2 = 0.04$. The importance of immigration and integration as most important problem rose from 13 percent pre-assassination to 29 percent post-assassination.
Figure 1 The immediate impact of van Gogh’s assassination on anti-immigration sentiment

Note: Values are means on a 5-point disagree-agree scale for groups t1.pre (n = 128) and t1.post (n = 148). The significance values (one-sided) are from independent sample t-tests (df = 274).
The next question we seek to answer is whether exposure to news in the direct aftermath contributed to even stronger agreement about immigrants being a threat to culture and security. We, therefore, split the sample into groups with high and with low levels of news exposure. We find news exposure to matter for attitudes of the post-assassination group. As shown in Table 1, respondents with high news exposure clearly have a more negative attitude than those with low levels of news exposure, \( t (146) = -1.94, p < .05 \). This result is especially compelling since we do not find any difference in attitude between high and low exposure groups prior to the murder of van Gogh, \( t (126) = 0.06, p = .96 \). This substantiates the claim that news in the immediate aftermath of the incident contributed to higher perceptions of threat by immigrants to culture and security.

If the coverage in the immediate aftermath of the assassination would have a long-lasting effect, then we should see no change from \( t1.post \) to \( t2.post \). Threat perceptions, however, were remarkably higher in wave 1 than in wave 2 for the post-assassination group indicating a decrease over time in negative attitude toward immigrants, \( t (67) = 1.81, p < .05 \). As outlined, we expected an impact of the rather deescalating news coverage concerning immigrants and integration issues in the weeks following the immediate aftermath of the assassination on the change in the post-assassination group. The bivariate correlation between news exposure and change from \( t1 \) to \( t2 \) in the threat index for the post-assassination group \( (n = 69) \) is positive and significant, \( r = 0.261, p < .05 \). In a multivariate OLS regression model assessing change, we explain the \( t2 \) threat index, controlling for the \( t1 \) measure, by adding news exposure to the model. With \( \beta = -0.208 (p < .05) \), news exposure relates significantly to the threat index at \( t2 \). The model explains more than 50 percent of the variance in the dependent variable. This result, in the light of news coverage putting immigration and integration into a broader perspective rather than blaming immigrants, points towards an effect of deescalating news coverage promoting social integration.

**SUMMARY AND DISCUSSION: OPINION DYNAMICS, CRISIS EVENTS, AND THE MEDIA**

The central questions of this study relate to the impact of the assassination of Theo van Gogh on attitudes towards immigrants and to the role of the news in mediating the incident. We demonstrated that a national crisis event such as the assassination had a strong impact on respondents' opinion, thereby confirming findings of earlier studies on the impact of this kind of real world occurrences on the public (e.g. Sicinski, 1969; Hofstetter, 1969; Meyer, 1969). We expected the murder to increase anti-immigration attitudes. The findings suggest that the incident had an effect on perceptions of immigrants and their religion as a threat to national culture.

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6 We, however, also note an increase in anti-immigration sentiment for the pre-assassination group, \( t (53) = -1.42, p < .10 \). News exposure is entirely unrelated to this change.

7 To provide a more conservative test, the model includes control variables such as gender, age, ideological leaning, and political interest. Ideology was assessed on a 10-point scale ranging from 'left' = 1 to 'right' = 10. Political interest was measured on a 4-point scale ranging from 'not at all' = 1 to 'very much' = 4. None of the control variables have a significant coefficient (not shown).
and security. This again is in line with previous studies on public opinion dynamics after terrorist attacks (e.g. Noelle-Neumann, 2002; Traugott et al., 2002).

Previous studies, however, largely come short by not taking into account the role of news media in disseminating information about the event. We assessed whether news exposure had a moderating influence on the impact of the real-world incident. We assumed that exposure to the rather fear-inducing coverage of the days following the assassination led to more pronounced threat perceptions. Indeed, the results confirmed this expectation, with respondents with high levels of news exposure agreeing significantly more with the picture of threatening immigrants. How long, however, did this effect last? For respondents in the post-assassination group we found a significant decrease in threat perceptions after a few weeks had passed, especially for those who had been exposed to the de-escalating news coverage subsequent to the immediate aftermath of the assassination (Uitermark & Hajer, 2005). Bivariate correlational evidence as well as multivariate tests point toward a robust positive relation between news exposure and change toward less fearful attitudes toward immigration. One caveat of our study is that we found pre-assassination respondents to show a substantial (though statistically insignificant) increase in their anti-immigration attitudes in the second wave. Our data do not allow us to conclusively interpret this finding, but it is suggested that respondents in the pre-group, following an assumed change after the assassination, displayed a higher level of attitude stability.

Given the robust finding of the change in attitudes for our post-group respondents between the two waves we conclude that, contrary to the immediate aftermath, the news media did a ‘good job’ in deescalating the situation in the weeks following the assassination. This result is in line with Nacos and Torres-Reyna’s (2003) analysis of the news coverage after 9/11 and its effects on public opinion toward Muslims. They showed that coverage of Arab-Americans was markedly more positive in the months after the attack in New York and subsequently argue that this positive coverage relates to more positive attitudes toward U.S. Muslim minorities.  

Moreover, a poll conducted one year after van Gogh’s assassination by TNS–NIPO shows that not more Dutch people than before evaluated Muslims negatively, but those who did so with more fervor than before.

### Table 1: News exposure moderates impact of assassination on anti-immigration sentiment

<table>
<thead>
<tr>
<th>News exposure</th>
<th>Threat index at measurepoint t1</th>
<th>Pre-assassination</th>
<th>Post-assassination</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>2.56 (n = 48)</td>
<td>3.33 (n = 52)</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>2.58 (n = 80)</td>
<td>2.91 (n = 96)</td>
</tr>
</tbody>
</table>

Mean difference: 0.02 (Post-assassination - Pre-assassination)

Note: Cell entries are mean values and the mean difference within columns.
*p < .05 for difference within column.

8Moreover, a poll conducted one year after van Gogh’s assassination by TNS–NIPO shows that not more Dutch people than before evaluated Muslims negatively, but those who did so with more fervor than before.
So, is this a ‘good media’ story? It indeed seems that, after a short period of dramatic coverage, news media contributed to social cohesion in covering the assassination in a deescalating manner. In that sense we see a close resemblance of news coverage of van Gogh’s murder and the 9/11 attacks. Both cases indicate news coverage that avoids stereotypical depictions of involved ethnic groups and rather emphasizes analysis, background, and systemic considerations. This type of news coverage has been coined thematic framing (Iyengar, 1991). Our findings provide important lessons for newsroom editors and executives. It seems of particular importance to increase awareness of the responsibility in the immediate coverage of dramatic events. This coverage is powerful in shaping public opinion and, although immediate reactions can be mitigated by subsequent responses, the first reports on such events are crucial.

One of the strengths, but at the same time main weakness of the present study is the data. On one hand, a quasi-experimental design such as the one tested here with a real-world assassination as manipulation can never be planned, and the simple fact of being able to utilize the data to look at the questions raised above is a major asset. We, on the other hand, readily admit that a different sample would have been preferable and would have allowed for investigating relationships in more detail and would have resulted in more confidence in our results. We now rely on a comparably small sample of undergraduate students as respondents and face substantial panel mortality. Since we rely on a quasi-experimental design, sample composition should, however, be less of a worry as we are not interested in the level, but the dynamics of anti-immigration attitudes. Furthermore, we carefully compared the different groups of the sample along a number of demographic characteristics and do not find substantial differences which ascertains us that group composition did not lead to biased results in group differences. Finally, the data on the news media coverage could be improved. We now rely on a secondary source to back up our analyses, but a more systematic analysis might reveal additional aspects of the relation between crisis events, news, and public opinion.

These considerations notwithstanding, our study of a dramatic real-world event and public opinion dynamics yielded important insights to better understand immediate and delayed public reactions to a crisis event and the role played by the media. Such insights are valuable to make sense of those rare events that significantly affect our political, economic, and social world.

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**BIOGRAPHICAL NOTES**

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