Reinforcing Spirals of Negative Affects and Selective Attention to Advertising in a Political Campaign

Christian Schemer
Institute of Mass Communication and Media Research
University of Zurich
Andreasstrasse 15
CH-8050 Zurich, Switzerland
Phone: +41 44 635-2074
Fax: +41 44 634-4934
ch.schemer@ipmz.uzh.ch

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Political communication strategies do not only aim at the voters’ minds, but also at their hearts (for an overview, see Kinder, 1994). Thus, communication research has demonstrated that political advertising is likely to elicit emotional reactions in voters (Brader, 2005; Chang, 2001; Kaid & Holtz-Bacha, 1993, 2006; Thorson, Christ, & Caywood, 1991). For example, Chang (2001) showed that attack advertising aroused negative affective reactions in voters thereby influencing their candidate evaluations. Additionally, certain affective states have been found to increase people’s involvement in and attention to political campaigns (e.g., Marcus, Neuman, & MacKuen, 2000). Specifically, fear or anxiety have been shown to enhance information seeking (Boyle et al., 2004; Cho et al., 2003; Isbell, Ottati, & Burns, 2006; Valentino, Hutchings, Banks, & Davis, 2008), political involvement (Marcus & MacKuen, 1993; Marcus, Neuman, & MacKuen, 2000), and attention to specific information that is likely to satisfy the need state induced by a specific affective reaction (Nabi, 1999, 2002, 2003).

Put differently, some studies suggest that affective reactions are precursors to the exposure or attention to political advertising, while others indicate that political advertising elicits affective reactions. Obviously, the relationship between exposure or attention to political advertising and affective reactions is bidirectional in nature. The only study that suggests such a dynamic is the survey by Cho and colleagues (2003) in the context of 9/11. In a two-wave panel survey, they found that TV news use in the first panel wave elicited negative emotions like fear and anger in the second wave. In a separate analysis, they demonstrated that negative emotions in first panel wave significantly predicted the use of TV news in the subsequent wave.

Although this finding suggests that media use and negative affectivity reinforce each other over time, the study design with two panel waves precludes a direct test of such processes. It is an open question whether these media effects and selection processes continue or wear out over time. Put differently, mutually reinforcing processes of political
campaigns eliciting negative affects that, in turn, elicit additional negative affect can be only shown on the basis of at least three panel waves, i.e., two subsequent periods that can be compared. This assumption is also put forward by Slater (2007). He argued that these mutual influences can be considered as reinforcing spirals of media effects and selectivity that can produce cumulative effects over time.

Additionally, the study by Cho et al. (2003) does not model media effects and attention to the news simultaneously. The separate analyses impede a direct comparison of whether the effect of TV use on negative affects is stronger than the effect of negative emotions on the attention to TV news. Therefore, the present study aims at a replication and extension of previous research. Specifically, the aim is a simultaneous test of the influence of political advertising on negative affective reactions and the selectivity in attention to political advertising that is due to these negative affective reactions. This test is based on data from a three-wave panel survey. This data base enables the study of media selection and effects over more than one period. The results shed light on the reciprocal nature of the influences between the attention to political advertising and negative affective reactions over time.

The Affective Impact of Political Communication

A bulk of research indicates that political communication strategies in campaigns do clearly aim at the emotions of voters (Graber, 2005; Kaid, 2004). Content analyses of advertising appeals suggest that political strategists embed emotional appeals in political ads (Johnston & Kaid, 2002; Kaid & Johnston, 1991, 2001; Marmor-Lavie & Weimann, 2005). These studies indicate that the content and form political campaign communication is likely to elicit affective reactions in audience members. For instance, issue ads relative to image ads for political candidates enhanced positive affective reactions such as pleasure in recipients (Thorson, Christ, & Caywood, 1991). These authors also found that support ads increased positive emotions while attack ads decreased pleasure. Additionally, Chang (2001) showed that attack advertising aroused negative affective reactions thereby influencing voters’ candidate evaluation. Furthermore, the use of symbols or the depiction of negative events or
issues like violence, drug use, crime, or riots is likely to elicit negative emotions in viewers (Brader, 2005; Gross & D'Ambrosio, 2004; Huddy & Gunnthorsdottir, 2000; Roseman, Abelson, & Ewing, 1986; Sears, 2001).

Survey evidence also indicates that exposure to political communication on television affects the audience affectively. For instance, Pan and Kosicki (1994) found that exposure to TV news enhanced patriotic feelings, intensified affective responses to the Persian gulf war, and strengthened positive feelings toward President Bush. Hibbing and Theiss-Morse (1998) found that news exposure increased negative emotions toward Congress members. Finally, a study in the context of 9/11 demonstrated that the use of television news elicited negative emotions but not positive affective states (Cho et al., 2003). Additional evidence comes from Holbert, Shah, and Kwak (2004) who found that TV news and crime drama use induces fear of crime.

A closer look at previous research substantiates the notion that political media content is more likely to induce negative affective reactions than positive emotions (Chang, 2001; Cho et al., 2003; Hibbing & Theiss-Morse, 1998). One reason for this negativity bias may be due to the negativism in political news or campaign advertising (Ansolabehere & Iyengar, 1997; Cappella & Jamieson, 1997; Crigler, Just, & Belt, 2006; Farnsworth & Lichter, 2003; Jamieson, 1992). Another reason may be an asymmetry in the likelihood of negative versus positive emotion elicitation (Cacioppo, Gardner, & Berntson, 1997; Ito, Larsen, Smith, & Cacioppo, 1998).

Irrespective of these specific causes, the cumulative evidence of research clearly suggests that the content and form of political communication can exert a strong impact on viewers’ emotions and that communication content is more likely to elicit negative affective reaction than positive emotions. However, previous studies do not only demonstrate that political campaigns are likely to elicit negative affective reactions. They also found negative affect increases selective attention and exposure to campaign stimuli.
Affect-Induced Selective Exposure and Attention to Political Communication

Previous research suggests that audience members select and process political information depending on their affective states (Isbell, Ottati, & Burns, 2006; Lang, 1991; Valentino, Hutchings, Banks, & Davis, 2008). Particularly, fear arousing political communication is likely to enhance the attention to (Valentino, Hutchings, Banks, & Davis, 2008), the processing (Redlawsk, Civettini, & Lau, 2007), and the recall of political information (Brader, 2005; Lang, 1991). Additional evidence comes from survey studies. Specifically, Boyle and colleagues (2004) found that negative emotions in the context of 9/11 predisposed audience members to learn more about the terrorist attacks. In contrast, positive emotions were not related to learning behavior.

Additional research demonstrates that affective reactions elicited in political campaigns increase involvement and learning in a presidential campaign (Marcus & MacKuen, 1993; Marcus, Neuman, & MacKuen, 2000). This effect is explained based on the theory of affective intelligence (Marcus & MacKuen, 1993; Marcus, Neuman, & MacKuen, 2000). Accordingly, people who experience anxiety in a political campaign do not rely on routine judgment formation anymore. In contrast, anxious voters should increase the attention to campaign stimuli in an effort to learn more about the source of the threat and. Conversely, enthusiastic individuals are assumed to perceive their environment as benign. Therefore, they should not interrupt their routines or enhance information seeking. In a survey in a presidential campaign, anxiety turned out to produce learning, but enthusiasm did not (Marcus & MacKuen, 1993).

Reciprocity of Affective Campaign Effects and Selectivity in Attention

The previous sections demonstrate that there are reciprocal relations between the effect of political communication on emotions and emotion-induced selective exposure or attention to political communication. Thus, these findings point to a dynamic in which campaign communication and selectivity mutually reinforce each other over time. The only study that suggests such a dynamic is by Cho and colleagues (2003). In a two-wave panel
survey, they found that television news use in the context of 9/11 elicited negative emotions like fear and anger. In an additional step, their study demonstrated that negative emotions significantly predicted the use of television news. Based on their findings the authors concluded “that the relationship between television news use and respondents’ negative emotions is reciprocal” (Cho et al., 2003, p. 323). A closer inspection of their results indicates that the influence of negative emotions on media selectivity was stronger (incremental $R^2 = .01$) than the impact of television news use on the arousal of negative emotions (incremental $R^2 = .03$).

However, these findings must be considered cautiously. First, the mutually reinforcing processes were not estimated simultaneously, but in separate analyses. This makes a comparison of the relative effects of media use on negative affects and the impact of negative affects on media use difficult. Therefore, it cannot conclusively be assumed whether the effect of television news on negative emotions is stronger than vice versa. Thus, when the relationship between media attention and negative affects is known to be reciprocal, then, the most accurate model would involve testing these relations simultaneously over time.

Second, although two panel waves are better than a cross-sectional study, no conclusion can be drawn as to whether these mutually reinforcing processes of media selection and effects continue in subsequent periods. In other words, it is not clear whether the media-induced negative affect in the second panel wave would have elicited additional attention to television use, which in turn may have produce additional negative affective reactions in viewers. The minimum requirement for the study of mutually reinforcing processes of political campaigns eliciting negative affects that, in turn, elicit additional negative affect is a three-wave panel. This design provides the researcher with two periods in which media effects and selective attention can be observed. This assumption is also put forward by Slater (2007) in his Reinforcing Spirals Model (RSM). In this model, the author proposes a synthesis of “the process of media selection and media effects into a more comprehensive model” (Slater, 2007, p. 281). Accordingly, these mutual influences are
considered as reinforcing spirals of media effects and selectivity that can produce cumulative effects over time. Such a model has been tested in various domains of media effects research, e.g., sexual satisfaction or behavior (Peter & Valkenburg, 2009), global warming perceptions (Zhao, 2009), social risk judgments (Slater & Rasinski, 2005), or aggressiveness (Slater, Henry, Swaim, & Anderson, 2003).

There are at least two important reasons for an integration of the processes of media selection and media effects into a single framework. First, the substantive conclusion that can be drawn from such a model is whether there are cumulative effects of media-induced negative affect and affect-induced attention to political advertising. Specifically, it can be observed whether political advertising results in an increase in negative affectivity that, in turn, causes additional attention to political advertising. It may also be the case that such spiral processes wear out. However, this can only be detected when more than one period is investigated.

Second, tests of reinforcing spiral processes can shed light on the relative strength of media effects and the effects of selectivity. More to the point, results from a RSM can reveal whether people's attention to political media content is driven by negative affect that is induced by campaign cues. In this vein, both media selection and effects are largely determined by political campaign cues. Conversely, it may be the case that people's initial selectivity determines the extent to which they are emotionally affected by a given political campaign. Thus, the RSM does not only allow the modeling of cumulative effects, but also an assessment to what extent certain phenomena are initialized or determined by external cues in the media or by internal motivations of audience members. This question is still one of the most pressing questions in research on media effects and gratifications (Rubin, 2002; Slater, 2007).

Thus, the previous sections have demonstrated the reciprocity of negative affective reactions as a response to political communication and the selective attention to political cues in the media that is due to negative affective reactions. The RSM offers an integrative framework for synthesizing such processes of media effects and selectivity. However, this
framework has not been used to *simultaneously* test media effects on affective reactions and affect-induced selective attention to political information in a longitudinal design with more than one period.

**Hypotheses**

The present research aims at testing the reciprocal influences between the effects of political advertising on affective reactions and the impact of negative affectivity on the attention to political advertising. As previously shown, both experimental and survey studies have shown that political advertising elicits negative affective reactions (Graber, 2005; Kaid, 2004; Kinder, 1994). Therefore, the first hypotheses states that political advertising elicits negative affective reactions in audience members (H1). Conversely, research also found that negative affective reactions increased attention to and information seeking in political campaigns (Marcus, Neuman, & MacKuen, 2000; Valentino, Hutchings, Banks, & Davis, 2008). Therefore, it is hypothesized that negative affective reactions enhance the attention to campaign information (H2).

A reinforcing spirals process depends on the fact that the influences assumed in H1 and H2 can be observed more than once in the course of a political campaign (Slater, 2007). An interesting question that has not been addressed so far is whether the influence of negative affects on attention to political advertising and vice versa change in strength over time. For example, it may be that cues in a political campaign elicit stronger emotional reactions in voters as the campaign progresses to a decisive or “hot” phase. Thus, as the volume of advertising increases, affective reactions are more likely to be elicited. Similarly, it can be expected that a growing campaign volume captures the attention of people that did not follow the political campaign before. This reasoning suggests cumulative effects, i.e., the effects hypothesized in H1 and H2 should increase as the campaign progresses. Therefore, it is expected that the effect of attention to political advertising on negative affect is stronger at the end of the political campaign than in the beginning (H3). Additionally, it is assumed that the affect-induced attention to political advertising increases over time (H4).
The combination of these hypotheses suggests that negative affective reactions and the attention to political advertising reinforce each other in the course of a political campaign. Specifically, political ads can elicit negative emotions, and these negative emotions in turn, produce higher and attention to political advertising. The previous hypotheses referred to the absolute strength of media effects and selectivity and to the development of these effects over time. An additional issue is whether the influence of people’s selective attention to campaign advertising due to negative affects is stronger or weaker than the influence of political advertising on voters’ negative affective reactions.

Ultimately, this amounts to the question whether voter reactions are determined by external influences such as campaign advertising or whether campaign effects are limited by internal forces such as selectivity in campaign attention. This is an important question because when voter reactions are determined by campaign cues then this is a potential gateway to manipulation, whereas selectivity in the use of campaign cues would shield voters from manipulative campaign strategies. Cho and colleagues (2003) found that the selectivity of media use due to negative affect was stronger than the influence of media use on the elicitation of negative affect. However, they did not test media effects and selectivity simultaneously. Given that previous research is not conclusive about this question we formulate the following research question: What is the relative strength of the attention to political advertising on negative affect compared to the influence of negative affect on the attention to political advertising (RQ1)?

Method

Context of the Study

In order to estimate a self-reinforcing spirals model, we rely on data from a three-wave panel study conducted in the context of a political campaign dealing the asylum law restriction in Switzerland. As in many other immigrant-receiving countries, asylum seekers and minorities from non-European countries have an extremely negative image (Holzer, Schneider, & Widmer, 2000; Schneider, 2008). Unsurprisingly, immigration policy is one of
the most important issues on the political agenda (Mahnig & Wimmer, 2003; Sciarini & Kriesi, 2003). To date, several referendums have been held that consistently aimed at enhancing migration control, reducing immigration, and deterring asylum seekers (Lavenex, 2007). The public approved most of these restrictions. The present referendum dealt with the restriction of the asylum law. In the debate, the political left (Social Democrats and Green Party) attacked the proposal that was originally supported by liberal and right-wing parties. In the campaign, humanitarian organizations, churches, labor unions, and intellectuals supported the claim of the political left that the restriction of the asylum law was inhuman, inefficient, and contradicted the humanitarian tradition of Switzerland. In contrast, the proponents argued that most refugees were bogus asylum seekers and criminals. Accordingly, stricter laws should be adopted to deter the abuse by foreign scroungers. Several means of deterrence were proposed, e.g., the reduction of social security benefits for refugees whose applications were dismissed. In sum, the conflictive nature of the debate between proponents of a stricter asylum law and so-called “bleeding-heart” liberals is likely to produce affective reactions in the public. The referendum about the asylum law restriction took place on September 24, 2006 and was approved by a majority of 68 percent.

Panel Survey

The sample for the three-wave panel survey was recruited by random digit dialing (random quota). The response rate (RR3) for the sample was .59. The questionnaire was programmed for an application of CATI (Computer Assisted Telephone Interview). For the first wave, respondents \( N = 1725 \) were contacted between 7/4 and 7/20, 2006. The second wave of the panel survey followed between 8/28 and 9/2 \( N = 1415 \). The final panel wave took place just after the referendum was held, i.e., after 9/24 \( N = 1094 \), 52 percent female, mean age = 48.18, \( SD = 17.11 \); 68 percent of our respondents held lower educational degrees). Thus, the sample was representative in terms of these demographic characteristics.
**Measurement**

Given that the campaign was about the restriction of the asylum law, group-related emotions were measured. Specifically, negative affective reactions that respondents experienced toward asylum seekers were assessed in all panel waves with a three-item scale (i.e., fear, anxiety, and anger; Cronbach’s α = .73 in the first panel wave, .76 in the second, and .78 in the third wave). The interviewees should report the strength of their feelings toward that group on a scale ranging from 1 “not very strong” to 5 “very strong”. In addition, attention to political advertising was assessed with a five-point scale on which respondents should report how important posters and ads in the newspaper were to them personally to get information about the political campaign (1 “not very important” to 5 “very important”; Pearson r = .57 in the first panel wave, r = .64 in the second, and r = .65 in the third). Given that TV ads are not allowed in Switzerland no questions were asked about that.

As control variables, demographics (age, sex, 0 “male”, 1 “female”, and education 0 “low education”, 1 “higher education”) and ideology (left-right self positioning, 1 “left” to 10 “right”) were measured in the first panel wave. As no hypotheses pertain to the impact of these controls on negative affects and attention to political advertising the result section gives only a cursory overview of these findings.

**Data Analysis**

In order to test self-reinforcing spirals of negative emotions and attention to political advertising a parallel-process model using structural equation modeling was fitted (Bollen & Curran, 2006; Duncan, Duncan, & Strycker, 2006). Negative affects toward asylum seekers and attention to political advertising were treated as latent variables. Then, a linear growth process for each construct was modeled to investigate the change in negative affects and the change in attention to ads in the course of the campaign. Latent growth curve models involve the modeling of two growth parameters, i.e., a latent intercept and a latent slope factor. The former represents the initial level of the constructs, i.e., the initial level of attention and negative affects. The latter captures the intra-individual change in the constructs. By
convention, the paths from the latent intercepts to the latent variables (negative affects and attention to political advertising) are constrained to 1. The means of both intercepts were constrained to zero for identification purposes. A linear intra-individual growth process for attention to political advertising and negative affects is achieved by fixing the paths from the slope to the latent variables to 0, 1, and 2, respectively. These latent constructs reflecting the growth processes were allowed to co-vary. Figure 1 depicts the model to be tested.

< Figure 1 >

Results

In general, the model showed a good fit to the data ($\chi^2 = 128.57$, $df = 114$, $p = .17$, $CFI = .99$, $RMSEA = .02$, 90% confidence interval: .01-.03). In order to facilitate the understanding of the present findings, descriptive results pertaining to changes in negative affects toward asylum seekers and attention to political advertising are reported in a first step. Second, the effects of the covariates are shortly presented. Third, the results of the hypotheses tests are presented.

The Change of Negative Affects and Attention to Political Ads over Time

First of all, the mean of the negative affect slope is significantly different from zero ($M = .054$, $p < .05$). This indicates that negative emotions toward asylum seekers became more negative in the course of the political campaign. Obviously, the campaign elicited negative emotions like fear and anger toward asylum seekers. An inspection of the latent means confirmed this. The negative affect increased from $M = 2.64$ ($SE = .03$) to $M = 2.67$ ($SE = .03$) in the second panel wave and to $M = 2.71$ ($SE = .04$) in the last wave. Additionally, the variance of the negative affect slope is significantly different from zero ($\sigma^2 = .041$, $p < .05$). This result indicates that there were inter-individual differences in the increase of negative affective reactions toward asylum seekers. In other words, the change in negative affective reactions of some individuals deviates significantly from the assumed linear growth process.
Interestingly, the attention to political advertising decreased from the first to third panel wave \((M = -.079, p < .05)\). That means voters became less attentive to political advertising as the campaign unfolded. An in-depth analysis indicated that the attention to political advertising developed in an inverted u-shape fashion with attention to ads increasing between the first \((M = 2.00, SE = .03)\) and the second panel wave \((M = 2.14, SE = .03)\), and then decreasing to a level that was lower in the last wave \((M = 1.88, SE = .03)\) compared to the first one. In addition, there are also individual differences in the attention growth process \((\sigma^2 = .018, p < .05)\). The significant variance parameters of both intercepts indicate that there were individual differences in the attention to political advertising \((\sigma^2 = .412, p < .01)\) and negative affects \((\sigma^2 = .583, p < .01)\) at the beginning of the campaign.

The correlations among the growth factors (intercepts and slopes) shed light on associations among the initial status and the growth trajectories. The slope and the intercept of attention to political advertising are negatively correlated \((r = -.19, p < .05)\). This finding indicates that people with an initially high attention to political ads increased their attention significantly less in the course of the campaign compared to people starting out with a low attention to political advertising. Furthermore, the intercept of advertising attention is positively correlated with the slope of negative affect \((r = .86, p < .01)\). In other words, people with a high initial attention to political advertising showed a steeper increase in negative affective reactions toward asylum seekers than people with a low initial advertising attention. No other correlation among the growth factors achieved statistical significance.

Before presenting the tests of hypotheses, results referring to the effects of the covariates on the growth factors are reported. Table 1 depicts the effects of the control variables on the growth factors. In short, female respondents experienced more negative emotions toward asylum seekers and were more attentive to political advertising in beginning of the campaign. Age exerted only an effect on the negative affect intercept. This indicates that elderly respondents experienced more negative emotions toward asylum seekers. Higher educated respondents showed less initial negative emotions, a less steep increase in negative affects over time, and lower attention to political advertising compared to
respondents with lower educational degrees. Finally, right-wing respondents felt more negative about asylum seekers and were more attentive to political advertising in the beginning of the campaign. However, they showed a smaller decrease in attention to political ads.

**Table 2**

*Self-reinforcing spirals Effects of Attention to Political Advertising and Negative Affect*

Table 2 depicts the main results that refer to the hypotheses. In the first hypothesis, it was assumed that attention to political advertising should elicit negative affective reactions in audience members. The findings provide evidence consistent with the hypothesis. Specifically, attention to political advertising in the first wave produced more negative affective reactions toward asylum seekers in the second panel wave. Similarly, attention to political advertising in the second panel wave enhanced negative emotions toward asylum seekers in the final panel wave. This result convincingly shows that campaign advertising aimed at people’s negative feelings toward the minority group.

**Table 2**

The second hypothesis stated that negative affective reactions enhanced audience members’ attention to political ads. The findings indicate that this effect occurred in both periods, i.e., negative affects toward asylum seekers in the first panel wave increased the attention to political advertising in the second panel wave. Additionally, negative affect in the second wave enhanced the attention that people paid to political advertising in the final panel wave. Thus, the findings confirm hypotheses 1 and 2. In combination, these results provide evidence for self-reinforcing spiral processes producing cumulative media effects. More to the point, attention to political advertising enhanced negative affects that, in turn, increased the attention to campaign advertising that, again, induced negative affective reactions toward asylum seekers.

Hypotheses 3 and 4 addressed the development of advertising effects and selectivity in the course of the campaign. To be more concrete, the third hypothesis stated that the
effect of attention to political advertising on negative affect should be stronger at the end of the political campaign than in the beginning. The findings in table 2 do not confirm this assumption. In the second period, the affective impact of attention to political advertising was similar in size to that in the first phase. In the fourth hypothesis it was assumed that there should be a stronger influence of affect-induced selectivity in the second than in the first phase of the asylum law campaign. However, there is no difference in the influence of negative affect toward asylum seekers on the attention to political advertising occurred between the first and the second period of the campaign. In both periods, negative affective reactions toward asylum seekers enhanced the attention to political advertising. The selectivity in attention to political advertising that was due to negative affects remained fairly constant throughout the campaign.

Finally, a research question asked about the relative strength of the influence of people’s selective attention to campaign advertising due to negative affects compared to the impact of political advertising on voters’ negative affective reactions. Results for the first phase of the campaign show that there was no difference between the advertising effect and selective attention effect. However, in the second phase the impact of attention to political advertising on negative affect was stronger than the influence of negative affect on the attention to political ads. This finding indicates that in the course of the political campaign the self-reinforcing spiral process is fueled or kept alive to stronger extent by campaign cues, i.e., political advertising, than by internal forces, i.e., enhanced attention to political advertising.

Discussion

The present study demonstrated the reciprocal relation between attention to political advertising and negative affective reactions in political campaigns. Specifically, it was shown that political campaign advertising directly elicited negative affective reactions toward a social group that was in the focus of the campaign. This result corroborates both experimental (Brader, 2005; Thorson, Christ, & Caywood, 1991) and survey evidence (Cho et al., 2003;
Pan & Kosicki, 1994) on the impact of political communication cues on affective reactions of the public. Additionally, the reverse dynamics was also demonstrated, i.e., that negative affective reactions enhanced attention to campaign cues. This also conforms to the results of extant research on affect-induced selectivity in information exposure and attention (Boyle et al., 2004; Cho et al., 2003; Isbell, Ottati, & Burns, 2006; Valentino, Hutchings, Banks, & Davis, 2008).

However, the present study goes beyond previous research by simultaneously modeling advertising effects and selectivity dynamics over time. The findings indicate that self-reinforcing spirals were at work. In other words, initial attention to political ads that was due to negative affect further enhanced these affective reactions toward asylum seekers. At the same time, initial advertising attention produced additional negative affective reactions that, in turn, increased attention to subsequent campaign advertising. This finding corroborates the assumption by Cho et al. (2003) that the relation between negative affect and increased attention to media or campaign cues is bi-directional in nature. This is a quite important finding because it suggests that people’s attention to the campaign is a product of the campaign itself. By capturing people’s attention to subsequent ads political campaign cues reinforced their effects on negative affective reactions toward asylum seekers. Thus, campaign effects may have perpetuated themselves over time.

The present result is in contrast to what Cho and colleagues (2003) found. They showed that in terms of explained variance the affect-induced selectivity to media is somewhat stronger compared to the media effect on affective reactions. This difference may be particularly due to the context in which their study took place. They investigated the reciprocal relations between attention to political news and negative affective reactions in the context of 9/11. The present research studied the effects of strategic communication, i.e., political advertising. Political advertising is per definition persuasive in nature and has the aim of stirring people’s emotions. In contrast, news reporting is lacking a clear-cut persuasive attempt. Additionally, the induction of negative emotions may be only a side effect that is not the primary aim of journalists. Therefore, in the case of news media use affect-induced
selectivity may be relatively stronger than the effect of news media use on negative affective reactions.

The present results also suggest that the reinforcing spirals process is fueled to a stronger extent by advertising cues than by people’s enhanced attention. This assumption is substantiated by the finding that the impact of political advertising in the second panel wave on negative affects in the third wave is stronger than the affect-induced selective attention in the same period. Thus, the present study shows what the driving force of the spirals process is when the process is running. However, the findings do not shed light on what initialized the spirals process. In the first phase, the effect of campaign advertising on negative affect was similar in size to the influence of negative affect on the attention to political advertising. In other words, the survey is inconclusive as to whether campaign cues or initial attentiveness got the ball rolling in the beginning of the spiral process.

The present finding that the effect of advertising attention on affective reactions was stronger the affect-induced selectivity in attention to ads may also be due to the lag between the panel waves. As the descriptive results have demonstrated, the attention to political advertising first increased and then decreased again below the initial level. This decrease in the final panel wave is mainly due to the choice of the last measurement occasion that took place after the referendum was held. After that date no additional attention to political advertising was possible or reasonable because the campaign was over. Therefore, we also failed to find a significant covariance between the slope of negative affects and the slope of the attention to political advertising. A significant correlation between these to growth factors would have meant that both growth processes go hand in hand. This would have further corroborated the assumption of reinforcing spiral processes that occur continuously over time producing cumulative media effects. In contrast, the present analysis can only demonstrate a shock-like effect, i.e., that attention to political ads increased negative affective reaction at a later point in time.

The timing of the panel survey may also explain why there was no change in the effects over time. Contrary to the hypotheses the study failed to find increasing effects of
affect-induced selectivity in attention to political ads or advertising effects on negative affective reactions. This may be particularly due to the fact that the last panel wave took place when the attention to the campaign had already diminished to the initial level. Even if negative affects had raised people’s level of attention to political ads, there would not have been any campaign stimuli available because the campaign was over. In contrast to attention to political advertising, there was a linear increase in negative affects toward asylum seekers. However, the study did not find any changes in the impact of political advertising on negative affect toward asylum seekers. This finding suggests that the advertising campaign constantly arouses negative affects in voters. This constant effect, however, was not strengthened nor did it wear out even after the campaign was over. This may also have to do with the timing of our study. If the assumption is right that people’s emotions are stirred when a campaign peaks then we could simply not demonstrate increasing media effects because our last panel wave missed the peak. If this reasoning is correct, then the negative affective reactions between the second and the third panel (i.e., at the peak) must have been even more negative than in the second and the third panel wave. However, given the crude temporal resolution of our panel design this reasoning is only speculative. Future studies could investigate these assumptions in more detail by relying on more than three panel waves.

The present research design may also explain the small effects. The effects shown in the study are influences that survived a period of four weeks. Given these long inter-panel intervals one may assume that, originally, these effects were stronger but diminished as the time passed by. An additional explanation for the effect sizes found in the present study refers to the fact that not all recipients are equally likely to react emotionally to the political campaign. From experimental research it is know that certain boundary conditions moderate affective influences or selectivity in attention or exposure to political communication. One important moderator may be the political knowledge of respondents (e.g., Isbell, Ottati, & Burns, 2006). On the one hand, knowledgeable voters are likely to correct or discount affective reactions in response to political messages. On the other hand, political sophistication can enhance the selectivity in media use. The reason is that political
sophisticates have more knowledge about the sources that provide the most valuable information. It may be that these people avoid political campaign advertising that is easy-to-understand information and rely more on media content that reports on background information. The results in table 1 tentatively corroborate this assumption: Respondents with higher educational degrees showed less attention to political advertising in the beginning of the campaign compared to people with lower educational degrees.

Given these caveats of the present research future studies should address such self-reinforcing processes in more details. This refers both to the methodology but also to the substance of the investigation. With regard to the methodology, research should study the time lags in spiral processes in more detail. Here, the temporal resolution is the most crucial aspect. The more measurement occasion the more insight do researchers get about self-reinforcing spirals processes. In addition, the investigation of possible moderators would also be a valuable avenue of research. With regard to the substance, it is suggested that scholars should test reinforcing spirals models also in other domains, not only in the domain of political advertising effects. The studies that have been conducted so far clearly provide evidence that the reinforcing spirals framework proposed by Slater (2007) is more appropriate to explain cumulative effects in different domains compared to unidirectional analyses of media effects studies or gratification research. Instead, the RSM encourages the integration of these approaches in order to capture social phenomena more appropriately.
References


Figure 1

A Reinforcing Spirals Model of Attention to Political Advertising and Negative Affect Toward Asylum Seekers

Note: The figure shows only the structural relations between negative affects and attention to political advertising. The effects of covariates is considered, but not shown in the figure. Similarly, the correlations among endogenous latent constructs were allowed, but are not depicted here.
Table 1

*Effects of Control Variables on the Growth Factors*

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<td>Education</td>
<td>-.24**</td>
<td>-.20**</td>
<td>-.12**</td>
<td>.03</td>
</tr>
<tr>
<td>Ideology</td>
<td>.33**</td>
<td>.11</td>
<td>.10**</td>
<td>-.11**</td>
</tr>
</tbody>
</table>

Note: Entries are standardized effects of control variables, ** $p < .01$, * $p < .05$
Table 2

*Reciprocal Influences of Attention to Political Advertising and Negative Affect Toward Asylum Seekers*

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Estimates (SE)</th>
<th>Parameters</th>
<th>Estimates (SE)</th>
<th>z Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neg. Affect1 → Pol. Adv.2</td>
<td>.11 (.02)**</td>
<td>Neg. Affect2 → Pol. Adv.3</td>
<td>.07 (.03)**</td>
<td>1.72</td>
</tr>
<tr>
<td>z Diff.</td>
<td>1.23</td>
<td>z Diff.</td>
<td>2.7*</td>
<td></td>
</tr>
</tbody>
</table>

Note: entries are unstandardized estimates; z Diff. represents the result of significance tests of the difference between parameters in a row and in a line, respectively.

**p < .01, * p < .05