

Effects of Facebook News Reception on Threat Perceptions and Personality Traits in Germany

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Abstract

Based on the dual process motivational model (Duckitt, 2001) and cultivation research (Gerbner, 1969), this study analyzes news reception on Facebook and its consequences for the recipient's world view, right-wing authoritarianism, and threat perceptions in Germany. An online survey was completed by 429 Facebook users. Results demonstrate that Facebook news reception is relatively low but as predicted influenced by duration and intensity of Facebook use. No correlation occurred with general interest in news, which supports the idea that people find news coincidentally. Regression analyses revealed significant posi-

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tive influences of duration on perceived economy-based threat and negative world view. The effects of news reception partly correspond to the findings of cultivation research; however, contrary findings appear with right-wing authoritarianism.

Threat perceptions are a crucial base for intercultural conflicts. At the same time, the media are an important source for the construction of threats and intercultural conflicts (Frindte & Haußecker, 2010). Due to the medial change and increasing Internet usage, the research of online media use is essential (Hasebrink & Schmidt, 2013). On the basis of social media use (e.g. 43% of German online users [Tippelt & Kupferschmitt, 2015]) and the rise of online-organized anti-migrant protest movements in Germany (e.g. PEGIDA) the question is: How do individuals use social network services (SNS) as a news source and how does it affect their perception of threat?

Sharing and Posting on SNS

Social networking sites (SNS) are typically defined as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (boyd & Ellison, 2007, p. 211). Uncontested, the most popular SNS is Facebook with 1.794 billion active users worldwide and 27 million in Germany (Facebook, 2017; Statista, 2016). Facebook allows individuals to create a personal profile page, connect with other people (“friending”) and share self

-generated or external content, e.g. articles, videos, etc. Further, it enables organizations and institutions to create business pages that may be “liked” by other persons or institutions. Users can subscribe to feeds of individuals and institutions to get notifications and status updates directly on their personal Facebook start page (so called “wall”). Thus, on the start page of Facebook, the user receives an individual stream of notifications, posts, and shared material by friends and subscribed feeds. If a link is shared, Facebook usually creates a small preview that contains the site title or headline or — depending on the site — even the first lines of the content. Additionally, one of the site’s images is displayed as a thumbnail. Although Facebook utilizes the first image on the shared website for the preview, the user may choose another one from the site manually. Business pages even allow customized previews with an uploaded picture.

Facebook as a News Source

Research of Facebook commenced in the year of its launch in 2004. In the beginning years, the main focus is on Facebook’s social function to get and keep in touch with people. Early research also asked for usage motives. Lampe, Ellison, and Steinfield (2008) observed the Facebook behavior from 2004-2007 and mentioned “get useful information” as a motive. The information motive can be found in several other studies (e.g. Bonds-Raacke & Raacke, 2010; Rauch & Schanz, 2013) but has to be interpreted as general information about people the user is connected with through the network. News instead is defined by Pew Research as “information about events and issues that involve more than just friends and family” (Gottfried

& Shearer, 2016, p. 3)

Later on, Baresch, Knight, Harp, and Yaschur (2011) wrote SNS in general are becoming de facto news services. All major news companies are represented on Facebook today. Their main aim is to lead users to their websites by publishing previews of potentially interesting content on their Facebook business pages. The same effect results if Facebook users post or share news stories they found on the website of a news company. Using the “Open Graph” feature every website owner may add a social icon or “Like” button on his or her site. Recipients simply click on this button to share the content on Facebook where — depending on the user’s privacy settings — others will find it, go to the page, share it and so forth. In this way, Facebook works as a multiplier of audience. Especially for print media SNS are a chance to generate revenue that has been lost in recent years as the prices for online advertisement are based on page visits (Glynn, Huge, & Hoffman, 2012). Besides that, many users or organizations share news for non-commercial reasons and link other sites. For the different motives for sharing content see Baek, Holton, Harp, and Yaschur (2011) or Lee and Ma (2012).

Although both scenarios, commercial and non-commercial sharing behavior, are applied on other SNS as well, Facebook has the highest news reception rate of all SNS in the U.S. (Facebook: 66%; Twitter: 59%; Tumblr: 31%; Gottfried & Shearer, 2016). In Germany, Facebook, Twitter and Google Plus show a similar news use rate of approx. 50% each. However, Facebook is used by half of all online users while Twitter and Google Plus only play a minor role (Newman, Levy, & Nielsen, 2015).

News Reception Behavior

Pew Research found that two-thirds of adult U.S. Facebook users (44% of all adult U.S. citizens) obtain news on Facebook (Gottfried & Shearer, 2016). The Reuters Digital News Report reveals that 40% of adult Americans use Facebook for news at least weekly. In Germany, this rate lies at 23%. An explanation might be that traditional news reception in Germany (e.g. TV news) is more pronounced than in the U.S. TV is still the main source of information for Germans (53%) (Newman et al., 2015). On the other hand, 43% of the U.S. population uses online news as the main source of information, compared to only 23% in Germany (Newman et al., 2015). So far, there is no specific data on Facebook news use in Germany available. These statistics about Facebook news use leads to our first hypothesis:

H1.1: Germans use Facebook as a news source less than users in the United States.

On Facebook the user can actively search for news either by visiting a news page or by using the global search with a (hashtag) search term. Both ways are based on a general interest in news. However, Weeks and Holbert (2013) found no relation between Facebook news reception and the use of offline news media. Lee and Ma (2012) revealed that information seeking is one predictor of news sharing on Facebook among others. In general, people do not join or search SNS for news but get informed more or less coincidentally. That means, on the personal Facebook “wall” the user receives notifications and status updates by friends and institutions. If a person logs-on to Facebook (e.g. for chatting), he or she may end up reading (news)

posts by his or her friends or subscribed organizations (Glynn et al., 2012). Statistics also point in this direction: Pew data reveals that 78% of U.S. Facebook users who get news through the network mostly see news while they are on Facebook for other reasons (Mitchell, Gottfried, Guskin, & Holcomb, 2013). What exactly they receive depends on the choice of friends and institutions and of their decisions on what to post and share. A total of 43% of German online news users say they do not have to search for news but get news items anyway (van Eimeren, 2015). Cheng, Xie, Zhang, Agrawal, and Choudhary (2012) prove that a news post gets the most comments immediately after publishing because users find it coincidentally on the top of their wall. As news reception on Facebook mostly happens by coincidence we argue that:

H1.2: There is no relationship between general news interest and Facebook news reception.

Facebook informs its users about new notifications and entries on the wall whenever they click on the start page. Facebook's app for mobile devices even notifies users automatically if new entries have been made. Usually, the user checks the wall regularly and receives news along the way. It appears to be logical that the chance to find news by coincidence increases with the time spent on Facebook. Data by Mitchell et al. (2013) also demonstrate that people who are using Facebook more than an hour a day get more news (67%) than people who use the platform less (47%). We conclude:

H1.3: People who have a higher Facebook use receive more news there.

Another influencing factor of news exposure appears to be the “friending” and subscribing behavior of the user. As a first point, the exposure to news items ascends with the number of friends. On the other hand, the characteristics of these friends are a crucial factor for the exposure as well. It can be assumed that people who are professionally involved in the news business (e.g. journalists and editors) post and share more news on Facebook than people with other professions. Facebook does not separate posts by friends from institutional posts users subscribed to; the same assumptions account for liking and subscribing to a Facebook business page. In this case, news institutions (e.g. agencies and magazines) are the sites with most news posts. Weeks and Holbert (2013) demonstrated that friending a journalist or news organization positively influences news dissemination. Further, their structural models demonstrate a significant positive relation between friending and news reception. Data collected by Pew Research also point in this direction: 54% of those who “like” a news organization (11.2% of U.S. adult Facebook users) agree to the statement *Facebook is an important way I get news* compared to 38% of people who do not “like” such an organization (Mitchell et al., 2013). In general, people who “like” a news organization express higher levels of news engagement (Mitchell et al., 2013). We suggest:

H1.4a: People who friended at least one journalist or editor receive more news on Facebook than people who have no such person in their list of friends.

H1.4b: People who subscribed to a news feed of a news company or service receive more news on Facebook than people who do not have such a subscription.

Cultivation Research

Media are an important aspect of socialization (Hofmann & Mikos, 2010). Especially in matters of threat, most types of threats are not learned primarily and immediately by the population but are instead cultivated by the media. Cultivation theory (Gerbner, 1969) postulates that people who watch much TV or use much media adopt the (dangerous) media reality and perceive the world primarily as dangerous. Past and current studies, e.g. by Beullens, Roe, and Van den Bulck (2011a,b), support this assessment. However, cultivation theory was used only to explain the effects of television and video games (e.g. Chong, Teng Siew, & Skoric, 2012; Vu & Lee, 2013). Research on internet-based media and SNS is almost completely missing. This may be caused by the main differences between traditional offline media and SNS. Originally, television and video games shared the common base of fixed content without feedback channels. Although this assumption is changing by interactive online-based features, SNS principally rely on user-generated content and users decide themselves what kind of content (makers) they desire to follow. Nevertheless, a study by Na (2012) found a cultivation effect analyzing South Korean Facebook users. Participants were asked to estimate the political orientation of people in general and of Twitter users. The “estimates of the probability of victimization for crimes and unemployment ratio showed that SNS heavy users perceive our society more negatively than light users” (Na, 2012, p. 63).

Characteristics of Facebook News

Negativity is a major news factor in traditional news

media (Galtung & Ruge, 1965). On Facebook, however, news publishing follows different rules (Neuberger, Langenohl, & Nuernbergk, 2014) and the percentage of negativity in general may be less because there is no gatekeeper for other topics. Although, breaking news on Facebook still underlie the same news factors as other media does. Posting “breaking news” has the most potential that people follow the link to the website of the media company. Further, we assume that people find news mostly by coincidence while scrolling through their wall (Glynn et al., 2012). In that sense, finding news means reading the article’s headline and / or looking at the preview picture. The user then decides to follow the shared link or not. However, it is almost impossible to avoid reading the first lines of the news and looking at the picture. In consequence, the text and picture preview is an important feature to direct attention and behavior of the user (Knobloch, Hastall, Zillmann, & Callison, 2003). Often the findings of research on visual news coverage suggest that the interest in news and the emotional involvement of the recipients increase with visual illustrations (e.g. Doelker, 2002; Wanta & Roark, 1994). Further, findings on visual agenda setting indicate that visual media content is able to influence the individual long-term memory of the recipients. Visualization also has an impact on the importance attributed to these events (Fahmy, Cho, Wanta, & Song, 2006; Wanta, 1988). Following the study by Rosengard, Tucker-McLaughlin, and Brown (2014) the user only finds the news on Facebook but reads it somewhere else in detail. This suggests that the preview Facebook creates is the only news input the user gets directly from the wall. In other words, Facebook provides a facile never-ending news stream which

may create a cultivation effect.

According to these assumptions and the results by Na (2012), we suggest:

H2.1: People who have greater exposure to news on Facebook have a more negative world view.

Dual Process Motivational (DPM) Model

According to Duckitt (2001), ideological beliefs are based on personality, social context, and social worldview beliefs. In his causal DPM model (see Figure 1) Duckitt proposed the combined effects of individual differences and situational processes of prejudice. According to the model (Duckitt, 2001), social environment influences threat perceptions. Although not mentioned in the DPM model, the media is viewed as an essential instance of socialization in the present study (Hofmann & Mikos, 2010) and will be located in the social context mentioned above. Most types of threats are not experienced primarily by the general population but are instead cultivated by the media. *Extended contact* (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) influences the perception of outgroups. This extended contact is media-transmitted, especially (through increasing digitalization) by social media news reception. Therefore, media presentations have a strong influence on the world view. At this point the cultivation hypothesis is relevant because it postulates that heavy users adopt the media reality that leads to the perception of a “scary world.” Finally, heavy media use has an effect on creating a dangerous world view.

According to the DPM model, people who perceive the reality as dangerous and threatening express higher values of right-wing authoritarianism (RWA), which results

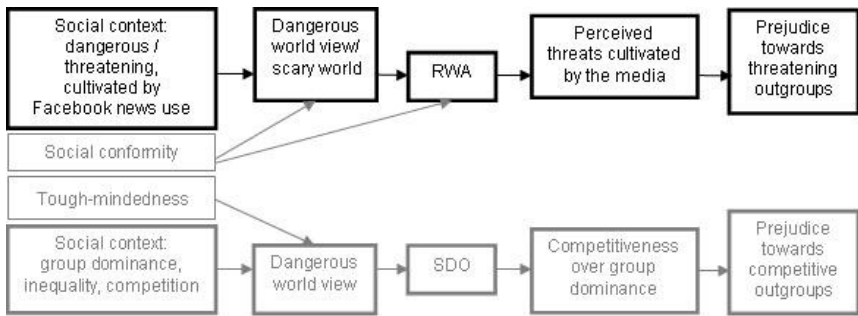


Figure 1. Theoretical framework according to DPM model and cultivation theory. RWA = right-wing authoritarianism, SDO = social dominance orientation. Based on “Differential effects of right wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups” by J. Duckitt, 2006, *Personality & Social Psychology Bulletin*, 32(5), p. 686.

in negative attitudes toward threatening and unconventional outgroups. These outgroups are a “value-based” threat because they are threatening social values, norms, and culture. They are perceived as socially deviant and as a social threat (Duckitt, 2006). RWA was also particularly effective as a predictor of prejudice toward members of an outgroup when manipulations of the outgroup emphasize potential social threat and difference from others. However, as seen in the DPM model (Duckitt, 2001), world view is a direct antecedent of RWA that leads to the hypothesis:

H2.2: People who have greater exposure to news on Facebook express higher RWA values.

If we follow the path of the DPM model from social and media context to world view and RWA to threat percep-

tion, there should also be a relation between news use and perceived threat. Thus, we set up our last hypothesis:

H2.3: People who have greater exposure to news on Facebook perceive more threat.

Method

Participants

An online survey was conducted in German language using SoSci Survey (www.soscisurvey.de) to create the questionnaire. It was accessible in September 2014 for everyone having access to the link. People were contacted through several university mailing lists across Germany and the link was published on several Facebook pages. Participants could voluntarily leave their e-mail address and win an Amazon voucher. A total of 429 German Facebook users completed the questionnaire. As 67.8% of them were female and 74.4% labeled themselves as students the sample is not representative. The mean age was 25.32 years (range from 16 to 51 years, median = 24, $SD = 5.57$).

Measures

In the introduction participants were told the study is about Facebook and exposure to news and explained the answering procedure in general. For measuring general news interest, people indicated on a flexible scroll bar ranging from 1 to 101 how much they are interested in world news und current affairs. A scroll bar enabled participants to indicate their opinion on a continuous scale that guarantees detailed measurement with a wide range. If participants indicated to have a Facebook account, we asked for the time spent actively using Facebook on a normal day of the week and on a day on the weekend using an

open question format.

For measuring Facebook news reception, three items by Glynn et al. (2012) and one by Gil de Zúñiga, Jung, and Valenzuela (2012) were added to three self-created items. We also included items of the Facebook intensity scale by Ellison, Steinfield, and Lampe (2007) and asked participants whether they had friended at least one journalist or editor and whether they subscribed to at least one feed of a news site.

Ten dangerous world view items were taken from Altemeyer (1988) and Duckitt (2001) and were shortened. To measure RWA, six items were chosen from the German RWA³D scale by Funke (2005). The three dimensions of RWA (aggression, submission, and conventionalism) were covered by two items each. A static order was used to avoid neighboring items measuring the same dimension.

We used well-known international scenarios and developments for measuring threat. People indicated how threatening they assess several current affairs based on the top issues in German television in September 2014 (8 items, e.g. crisis in East Ukraine, outbreak of Ebola in West Africa, [Krüger, 2015]) and general long-term developments (8 items, e.g. risk of terrorist attacks in Europe, climate change). Additionally, people could choose a “never heard of” option.

All English items were translated and carefully adapted to a German context. Except for general interest in news and friending, we used a 7-step Likert scale (1 = *strongly disagree*; 7 = *strongly agree*). Within an item block all items were rotated with the static RWA scale as the only exception. Reliabilities varied from $\alpha = .77$ to $\alpha = .86$. Participants self-reported sociodemographic data

included age, sex, and student status. The latter was used to estimate the sample bias. Finally, people were asked to indicate their political attitude on a flexible scroll bar ranging from 1 (left) to 101 (right).

Results

Table A in the appendix displays the correlations of all variables and scales. Descriptive results including means, standard deviations, ranges, and numbers of items are shown in Table 1. To check the compatibility of our items with the DPM model, an explorative factor analysis of the threat items relating to long-term developments was conducted. Using varimax rotation two factors appeared: five items connected to politics and values load on the first factor. We call them *value-based threat* items. On a second factor we found three items broached the issue of costs and resources. This factor can be called *economy-based threat* (for details see Table B in the Appendix). This two dimensional set of threats can also be found as *symbolic* and *realistic threat* in the Intergroup Threat Theory (Stephan & Stephan, 2000) and covers the two pathways of the DPM model by Duckitt perfectly (see Figure 1).

Facebook News Reception

The Facebook intensity scale originally contains duration of Facebook use. Following the coding scheme by Ellison et al. (2007) to transform time specifications into categories, over 50% of the people were assigned to the highest category (over 400 minutes a week). For this reason we decided to separate duration of use from the intensity scale and treat it as a single variable. We calculated a mean Facebook use of 8.82 ($SD = 8.11$) hours a week that

Table 1

Descriptive Results Including Numbers of Items, Cronbach's α , Ranges, Means, and Standard Deviations

Variable / Index	Items	α	Range	M	SD
Time on Facebook	1	.	open	1.33	1.23
Facebook Intensity	8	.83	1 (low) ... 7 (high)	3.15	1.15
News interest	1	.	1 (low) ... 101 (high)	75.24	20.39
Facebook news use	6	.80	1 (low) ... 7 (high)	2.84	1.16
Friending a journalist	1	.	0 (no) ... 1 (yes)	1.66	.48
Subscribing to news feed	1	.	0 (no) ... 1 (yes)	1.56	.50
World view	9	.82	1 (low) ... 7 (high)	3.12	.98
Current threat	7	.83	1 (low) ... 7 (high)	4.72	1.03
Realistic threat	3	.49	1 (low) ... 7 (high)	4.32	1.12
Symbolic Threat	5	.77	1 (low) ... 7 (high)	3.50	1.22
RWA	6	.87	1 (low) ... 7 (high)	2.56	1.14
Age	1	.	open	25.32	5.57
Sex	1	.	1 (female) ... 2 (male)	1.32	.47
Political attitude	1	.	1 (left) ... 101 (right)	35.84	17.46

corresponded to 75.6 minutes a day. The intensity index without duration reached a mean of 3.16 ($SD = 1.15$); 6.5% of the participants scored 5 or above and were considered as high-intense Facebook users. One third of the participants had friended at least one journalist or editor; 57.6% had no such person among their friends. Further, 42.4% subscribed to at least one news feed, 53.1% did not.

In H1.1 we suggest that people in Germany use Facebook as a news source less than people in the U.S. A total of 40% of adult Americans used Facebook for news at least weekly in 2014 (Newman et al., 2015). The average score for Facebook news reception in Germany is relatively low at $M = 2.84$ ($SD = 1.16$) on the 7-step scale; if we define news users as people demonstrating values over 4, only 5.4% can be seen as news consumers on Facebook. Therefore, H1.1 is supported.

H1.2 follows the idea that there is no relationship between general news interest and Facebook news reception. As predicted, there appears to be no significant correlation between general news interest and exposure to news on Facebook ($r = -.040$, n.s.). Focusing on the item, *On Facebook I find news mostly by coincidence*, reveals an average of $M = 5.05$ ($SD = 1.74$; 1 = *strongly disagree* to 7 = *strongly agree*) and 61.1% agree to this statement with values of 5 or above. Thus, H1.2 is supported.

As news reception is based on coincidence, we suggest in H1.3 that people who have a higher Facebook use also receive more news. We separated heavy users from light users by median split and compared both groups. The Mann-Whitney U test reveals that heavy users (according to duration) show a higher news reception ($M = 3.19$, $SD = 1.17$) than light users ($M = 2.39$, $SD = .98$, $U = -7.215$, $p < .001$). Similar results could be found when heavy users were defined by median split according to intensity of use. Light users only have an average news reception of $M = 2.39$ ($SD = 1.01$) while heavy users reach $M = 3.35$ ($SD = 1.11$, $U = -8.853$, $p < .001$). Additionally, a stepwise regression analysis was conducted to investigate influences on Facebook news reception. Subscribing ($\beta = -.189^{***}$), dura-

tion ($\beta = .180^{***}$), and intensity ($\beta = .422^{***}$) demonstrate significant effects, and there are significant correlations with economy-based threat ($r = .095^*$) and RWA ($r = .125^{**}$) as well. Through the results of the U test and the significant (weak) influences of duration and intensity, H1.3 is supported.

H1.4 states that people who have a) friended at least one journalist or editor or b) who subscribed to at least one news feed receive more news than people who have no such person as a friend or have no subscriptions. To demonstrate the impact of friending and subscribing, Mann-Whitney U tests were performed since the values are not normally distributed. Significant differences between friending and not friending occurred with: Facebook news use, subscribing, time and intensity, value-based threat, RWA, and age. In case of subscribing, significant differences only emerged with the Facebook scales (news-use, time, intensity) and friending. For details see Table 2.

Facebook and Threat

In the hypotheses of the second block we suggested that people who have a higher Facebook use express a more negative world view (H2.1), higher RWA values (H2.2), and higher levels of perceived threat (H2.3). Again, we used median split of duration values to separate heavy from light users. Accordingly, a heavy Facebook user uses the platform for more, a light user for less than seven hours a week. Mann-Whitney U tests reveal a significant difference between the two groups in the matter of perceived realistic threat ($U = -3.00$, $p < .01$), while there appear to be no significant differences between heavy and light users concerning current threat, symbolic threat,

Table 2

Means and p Values of Mann-Whitney U Tests between Subgroups of Friending a Journalist / Editor and Subscribing to a News Feed

	Friending		<i>p</i>	Subscribing		<i>p</i>
	Yes	No		Yes	No	
General news interest ^a	79.93 (21.10)	73.36 (19.93)	.000	78.94 (19.30)	72.30 (21.04)	.001
FB intensity ^b	3.42 (1.12)	2.99 (1.14)	.001	3.47 (1.04)	2.90 (1.18)	.000
Facebook news use ^b	3.13 (1.26)	2.67 (1.08)	.000	3.28 (1.19)	2.49 (1.04)	.000
Time spent on FB ^c	10.95 (9.90)	7.72 (6.87)	.001	11.51 (9.19)	6.71 (6.59)	.000
Friending ^d	.	.	.	1.56 (.50)	1.74 (.44)	.000
Subscribing ^d	1.43 (.50)	1.62 (.49)	.000	.	.	.
Value-based threat ^b	3.23 (1.15)	3.61 (1.24)	.003	3.47 (1.24)	3.51 (1.19)	n.s.
RWA ^b	2.34 (1.07)	2.66 (1.16)	.010			n.s.
Age ^c	26.82 (6.04)	24.34 (4.72)	.000	24.73 (4.59)	25.79 (6.12)	n.s.

Note. Standard deviations in parentheses, n.s. = not significant
^a scale from 1 = *no interest* to 101 = *high interest*. ^b scale from 1 = *low* to 7 = *high*. ^c open question. ^d 1 = *yes*, 2 = *no*.

world view, and RWA. If the intensity of Facebook use is applied for the median split, none of the variables under research display significant differences. This can be interpreted as a proof of the coincidence suggestion. However, heavy Facebook users express higher values for all threat dimensions, as well as for world view and RWA. Therefore, Facebook use appears to play a role although there are no significant differences between heavy and light users. To

investigate the influences of Facebook use on threat perception, world view, and RWA again, stepwise regression analyses were conducted. For economy-based threat and world view, duration has weak but significant positive influences ($\beta = .165^{***}$ and $\beta = .135^{***}$). Facebook news-use ($\beta = .114^{***}$) and general news interest ($\beta = -.157^{***}$) are predictors of RWA. No significant influences for friending, subscribing, and intensity were found. Furthermore, general news interest lacks an effect on either world view or threat. Table 3 displays all significant predictors. In conclusion, H2.1 is supported only in the case of news reception. There is no significant influence of duration or intensity on RWA. Interestingly, general news interest is a negative predictor for RWA while Facebook news reception shows a positive influence. Contrary, H2.2 is supported only for the influence of duration. The longer people use Facebook, the more negative their world view. All other Facebook indicators show no significant influence on world view. As there was neither an influence of duration nor intensity on threat, H2.3 is not supported.

Finally, we performed stepwise regression analyses again separately for heavy and light users. The data demonstrates that Facebook news reception significantly influences RWA only in the light user group. The moderation test using the Process macro by Hayes (2013) results in significance: Duration of Facebook use is partly moderating the positive relation between Facebook news reception and RWA ($p < .05$, CI [-.0228, -.000]). Finally, we can conclude: People who receive more news on Facebook express higher RWA values but only if they use Facebook for a limited time.

Table 3

Standardized Coefficients of Stepwise Multivariate Regression Analyses with Different Threat Types, World View, and RWA as Independent Variable

	Economy- based threat	Value- based threat	Current threat	World view	RWA
Political attitude		.434***		.216***	.459***
General news in- terest			.174***		-.157***
Facebook news use					.114***
Time spent on Facebook	.165***			.135***	
Age			-.165***		

Note. *** $p < .001$

Discussion

Based on the DPM model (Duckitt, 2001) and cultivation research (Gerbner, 1969) the study analyzed a Facebook user's exposure to news and its impact on their world view, right-wing authoritarianism (RWA), and threat perception in Germany. An online survey was completed by 429 participants (67.8% female, $M_{age} = 25.3$ years) in September 2014. We used current affairs, e.g. the Ukraine crisis or Ebola in West Africa, that were dominating the news in on- and offline media as threat indicators and standard scales by Funke (2005), Duckitt (2001), and Altemeyer (1988) for measuring RWA and world view.

News by Coincidence

Results demonstrate that Facebook news reception of

our young, well-educated German sample (mean age 25.32 years, 74.4% students) is lower than the average of U.S. citizens. Only 5.4% of the participants scored 5 or above on the news index. One reason for this result may be seen in the number of regular Facebook users, which still is higher in the U.S. (approx. 70% of adult population) than in Germany (approx. 30%). Further, fewer online users use social media in general for news reception in Germany (25% vs. 40% in the U.S., Newman et al., 2015) and also online news consumers are more orientated to online platforms of traditional media. A main source of news reception and information in Germany still is traditional TV (53%). In contrast, in the U.S. the main source is online (43%), TV in general ranks second (40%, Newman et al., 2015).

Studies researching the online news use in Germany in general point out that low levels of news reception might result from a different interpretation of the term “news.” Van Eimeren (2015) argues that people maybe do not recognize information as news because of the different layout online. A recent study by Vraga, Bode, Smithson, and Troller-Renfree (2016) empirically supports this assumption for Facebook although news content receives the most attention overall (Vraga, Bode, & Troller-Renfree, 2016). Further, it might be possible that only hard news is understood as news while news about human interest topics is received but not considered as “real” news. Thus, the news reception on Facebook may be higher than we could measure. Additionally, self-report might be not the best method since people are usually not very good at recalling their social media use (Junco, 2013).

The data shows no correlation between general interest in news and the news reception on Facebook which repli-

cates the findings of Weeks and Holbert (2013) and also fits data by Pew Research. This appears to be an important point as people can hardly avoid receiving news on their wall or through their friends even if they are not interested in news and are on Facebook for other reasons (Mitchell et al., 2013). Accordingly, the reception happens more or less by coincidence. Still, added friends and subscribed feeds are controlled by the user. Facebook members cannot predict what kind of post a friend or organization will publish next and there is only a limited control over what happens to their own posts. Further, the findings underline that Facebook cannot be treated as a “normal” news medium. Journalist surveys also reveal that on social media in general news publishing follows different rules, e.g. being up-to-date plays a more important role and backstage stories may be told (Neuberger et al., 2014). Further, postings by commercial news services are usually meant to lead people to the appropriate web page.

Influences on Reception

Friending a journalist or editor and subscribing to a news feed are important indicators whereas friending has stronger influence. People who friended a journalist have a significantly higher Facebook use (duration and intensity) and a significantly higher news reception. The same results appear in case of subscribing to a news organization. Therefore, it may be argued that both probably measure the same and both might be influenced by the duration of Facebook use. Although it seems that heavy Facebook users (in matter of duration) friend and subscribe more than others, differences between both appear. Friending a jour-

nalist means significantly less perceived economy-based threat and lower RWA values. Both differences cannot be found in the case of subscribing to a news feed.

General news interest has a negative relationship with RWA while Facebook news reception shows a positive one. We argue that little interest in news leads to a lack of information. Probably these people only get news about major events with a high news value. They may not even get the information from the media but rather through peers in the way of "Have you heard that..." Facebook news reception is not the opposite of disinterest in news (there is no correlation) because reception is coincidental. We believe that Facebook users follow and subscribe to people and feeds that are similar to their own opinions. As Facebook offers also non-mainstream media the opportunity to reach a broad audience, a user with high RWA values will find more news services that fit his or her opinion than on television or in print media. The opportunity to personalize news according to the attitudes of the user may give a reason why people with high RWA values receive more news on Facebook.

Duration appears to moderate the influence of Facebook news use on RWA. As the power of duration is significant only for light Facebook users (in matters of time), we suggest that these users probably receive a relatively large amount of news but in a short amount of time. Thus, they might scroll through their wall receiving a great deal of news headlines and pictures but do not elaborate on them carefully.

The study demonstrates differences between the measure of duration and intensity at many points. We used the standard intensity scale by Ellison et al. (2007) as a com-

plementary scale to the duration measure. However, we could not apply the original composition of the intensity scale due to relatively long duration of Facebook use. Without including duration, we can conclude that the intensity scale today is not a substitute for the time spent.

Future Research

Still we do not know anything about causality in this case. Some researchers might argue in the way we just described: People with certain RWA values chose the appropriate feeds. This would mean, on the other hand, that content on Facebook had no influence. If this was to be true, how can we then explain mass phenomena, e.g. Arab Spring or protest movements in Germany, that were mostly organized via social media and have led to societal discussions? Longitudinal studies are required to research the connection between RWA and Facebook news use also on a causal level. RWA was assumed to be a stable personality dimension for many years but studies demonstrate that threatening media input has the potential to increase authoritarianism (Duckitt & Fisher, 2003; Asbrock & Fritsche, 2013). A recent longitudinal study by Onraet, Dhont, and van Hiel (2014) found bidirectional effects between RWA and external threat.

Focusing on RWA the better question would be: Are there any differences in RWA values between Facebook users and non-users? Do people with high RWA scores use Facebook more often? Within this study we cannot answer this question. Some researchers agree with this statement as they found that anxious people use Facebook more often (Koleva & Rip, 2009) and anxious attachment style leads to RWA (Weber & Federico, 2007). However, Panek,

Nardis, and Konrath (2013) and Davenport, Bergman, Bergman, and Fearington (2014) measured that authoritarians use Facebook less than non-authoritarians.

In this study we wrote about the user's behavior. At present, we do not know much about the characteristics of the news on Facebook we are talking about. Content analyses of the posts (not of the linked sources) could be one opportunity to obtain an enhanced understanding of that special kind of (user generated) content. Important indicators would be frequencies and topics of the posts as well as the number of likes and comments. Caused by Facebook's algorithm, users who subscribe to a news feed do not get all posts of the feed on their wall. One reason for the selection is the massive amount of posts the user would otherwise receive and probably could not handle. Another is Facebook's strategy to show only relevant posts. Therefore, content analyses of entire news feeds do not seem efficient as each user gets a more or less unique selection of posts according to his or her preferences and habits. That is why we have to get back to the individual level and interview users about their experiences, habits, and perceptions. Another promising approach appears to be eye tracking, which allows the researcher to follow the user's trace of attention on the screen (Duchowski, 2007; Vraga, Bode, & Troller-Renfree, 2016). If the shared website contains pictures, the user usually will find these pictures on Facebook as well. That raises the question of how they influence the evaluation of the shared story behind them. Finally, social endorsement seems to be another promising field for further research (Messing & Westwood, 2012).

Impact for Society

Since 2015 over one million refugees have arrived in Germany. New online-organized protest movements against Islam and migrants in general have been founded in many German cities and attract thousands of followers on SNS. Additionally, the number of criminal acts against migrants increased dramatically. Based on our findings we advocate for a new sensitivity in handling social media accounts since each post potentially influences people. Recipients with high RWA values prefer Facebook as a news source instead of mainstream media. When time is limited, news postings are often not elaborated carefully and can lead to people being vulnerable to right-wing biased messages that are usually not scrutinized (Rauch & Schanz, 2013). Facebook's algorithms form a virtual "echo chamber" that will reinforce the process (Bessi et al., 2015). Especially journalists but also civil society in general will be challenged by these developments.

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