

How Are Attitudes Toward News Coverage of Immigration Related to General Trust in News Media? A Longitudinal Test of Spillover Effects of Hostile Media and Credibility Perceptions

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Trust in news media can be understood as the expectation that the news media will fulfill their social function. The factors that predict trust in news media, such as media content or the characteristics of the recipients, are well researched. To date, however, little attention has been paid to two areas that our study addresses: the role of issues in building trust in news media and longitudinal analyses. Based on a representative three-wave online panel survey in Switzerland, a cross-lagged panel model shows that credibility judgments of issue-specific coverage are positively correlated with general trust in news media. However, no causal effects on trust are found over time.

Keywords: credibility, hostile media perceptions, trust in news media, cross-lagged panel model, fixed effects regression

Sometimes, as with the COVID-19 pandemic or election campaigns, single issues dominate the media agenda for weeks or months. Continuous exposure to an issue can lead to issue fatigue (Gurr, Schumann, & Metag, 2022), where recipients become annoyed and develop negative attitudes, such as perceiving coverage as less credible (Gurr & Metag, 2021) or biased, reflected in hostile media perceptions (HMP, Perloff, 2015). The extent to which such *attitudes toward reporting on certain issues* can have a long-term effect on *generalized trust in news media* has not yet been researched.

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Our study examines how hostile media and credibility perceptions about specific issues, such as migration, affect general trust in news media. This aligns with recent approaches distinguishing between topical and general media trust (Tsfati et al., 2022). Our research builds on this by examining how these constructs are cross-sectionally related and influence each other over time.

We thus examine trust in relation to a specific topic—migration—specifically, an immigration initiative in Switzerland. We focus on this topic for several reasons. First, news media trust is inherently connected to reliance on news media information and the risk of accepting information as true (Hanitzsch, Van Dalen, & Steindl, 2018). People who trust news media are more likely to use the information they get in conversations with peers or for their individual decision making. This aspect of relying on the media becomes particularly relevant when decisions are made based on media information. In democracies, the most important political decisions people make based on the information they receive are about elections. Therefore, studying trust in news media as an important factor in how people form opinions (Dahlgren, 2018) is especially important in the context of elections. In our study, we examine a referendum to restrict immigration in Switzerland. In these referendums, citizens are called on to make direct democratic decisions *on specific issues*. This makes referendums an ideal context for studying opinion-formation processes concerning a specific topic. With regard to the media system, Switzerland exemplifies the democratic-corporatist model (Hallin & Mancini, 2004; Humprecht, Castro Herrero, Blassnig, Brüggemann, & Engesser, 2022) and is characterized by high traditional media use (Newman, Fletcher, Robertson, Eddy, & Nielsen, 2022), low levels of media fragmentation and polarization, and alternative media use compared with other countries, such as Italy or the United States, but similar to Denmark (Steppat, Castro, & Esser, 2021). This includes relatively stable trust levels over time. However, we expect coverage on referendums to be crucial cases where the formation of trust in news media takes place and which people use to evaluate whether the media can fulfill their social function.

Second, we chose immigration as a topic because it is highly politicized, highly relevant in European societies, and receives much elite criticism. In Switzerland, this issue was particularly prominent following the 2014 initiative “against mass immigration.” This initiative advocated for Switzerland to restrict immigration using quotas and contingents. The initiative also sought to prohibit the signing of international agreements that ran counter to this objective (Strasser, 2019). Since the initiative was surprisingly accepted by the people, the topic of migration was of high public importance in the following years.

The presence of this issue in public discourse heightens the possibility that people pay attention to issue-specific media coverage and develop attitudes toward it (Mummolo, 2016). We therefore expect that attitudes toward immigration coverage might be more pronounced than attitudes toward other issue-specific coverage, making it more likely to find effects on general media trust. This might not only apply for Switzerland but also for other countries where immigration is not part of a referendum but plays a major role in the public discourse (Eberl et al., 2018). To choose the topic depending on its prominence in the public discourse is in line with Tsfati and colleagues (2022) who used similar criteria to select topics for studying trust in news media.

Against the backdrop of decreasing trust in news media in some countries in recent decades (Hanitzsch et al., 2018; Kalogeropoulos, Suiter, & Esser, 2019), investigating the relationship between

the perceived performance of news media with regard to specific issues and trust in news media is highly relevant. Theoretically, it is highly plausible that perceiving the media as biased against one's own position and rating the credibility of issue-specific coverage as low contribute to not trusting the media generally. However, the contrary argument is also plausible: Having a lower level of trust in news media results in a lower judgment of the credibility of issue-specific coverage and greater hostility toward that coverage. Studies that examine these possible spillover effects are missing. With our study, we therefore contribute to the discussion on how volatile trust in news media depends on the coverage at a particular time and how evaluations of specific media content are related to the expectation that news media will fulfill their societal functions.

Trust in News Media

Rooted in different research strands, there are several definitions of trust in news media. Based on sociological definitions of trust, trust in news media is understood as beliefs about the fulfillment of expectations about the societal function of the news media as a system. Most prominently, Kohring and Matthes (2007) described trust in journalism as trust in the specific selections that journalists make in their daily reporting. Similarly, Müller (2013) defines trust in news media as "the belief that the perceived institutional performance conforms to the expectations of the individuals" (p. 40). Fawzi (2020) also takes the societal functions of the news media as the starting point and asks for evaluations of this fulfillment by citizens. We follow these approaches and define trust in news media as the perceived fulfillment of expectations about societal functions (see also Fawzi et al., 2021).

There have been several approaches to categorizing the antecedents of trust in news media. Fawzi and colleagues (2021) differentiated social, political, and media-related characteristics. Examining media-related characteristics in the context of this study, most studies focus on the relationship between use and trust in news and show a significant correlation between both (for an overview, see Strömbäck et al., 2020). However, there have been few attempts to capture media perceptions and their influence on trust in news media. Additionally, previous studies on trust in news media usually did not consider issue-specific aspects. The few studies that have dealt with issue-specific aspects of trust in news media have found that recipients have different expectations about news coverage depending on the issue (Jungnickel, 2011), that journalistic practices are assessed differently (Grosser, Hase, & Wintterlin, 2019), and that the trustworthiness of individual news items varies depending on the issue (American Press Institute [API], 2016; Flanagin & Metzger, 2000; Fogg, 2003; Miller & Kurpius, 2010).

Attitudes Toward Issue-Specific News Coverage

Within research on media perception and effects, hostile media research is the strand that most explicitly deals with issues of news coverage. In essence, it assumes that people with strong preexisting attitudes toward an issue are more likely to perceive media coverage of that specific issue as biased and hostile (Perloff, 2015). The effect has been replicated in various different settings, such as politics (Eberl, 2018) and science communication (Kim, 2010), and its consequences are connected to behavioral and attitudinal outcomes (Perloff, 2015). The basic rationale is that people's perception that their group is mistreated by the media with respect to one specific topic also matters for more global attitudes such as

generalized trust in news media, political efficacy, or trust in politics as well as corrective actions (e.g., Gunther & Chia, 2001; Perloff, 2015; Tsfati & Cohen, 2005a).

The second concept linked with attitudes toward issue-specific coverage is credibility. Credibility is a concept that has a much longer tradition in communication science than trust. Traditionally, it subsumes two categories: competence and trustworthiness (Hovland, Janis, & Kelley, 1953). Competence refers to the perception of the communicator's abilities, and trustworthiness refers to the honesty of the communicator and, thus, to the absence of persuasive intentions. Although credibility research remains popular in academic discourse, it has been criticized by various authors for its lack of theoretical foundation (Earle & Cvetkovich, 1995; Kohring, 2004; Metzger, Flanagin, Eyal, Lemus, & McCann, 2003). Especially with the rise of trust research, the term trustworthiness gained prominence. In this context, credibility is conceptualized as a subordinate dimension of trustworthiness and an antecedent of trust, which refers to the content of a communicator's message and describes the factual accuracy and believability of the information (Bentele & Seidenglanz, 2008; Dalen, 2019; Kohring, 2002; Kohring & Matthes, 2007). The focus of credibility is therefore narrower than trust. Credibility refers only to the evaluation of news content, such as a message, information, or coverage of a specific issue (see also Prochazka & Schweiger, 2019). Trust in news media refers to the expectation that the media fulfills societal functions, of which providing accurate information is just one (Dalen, 2019). Additionally, van Dalen (2019) argued that credibility is less stable and may vary across different issues of the coverage or sources of the news. We follow this argument and conceptualize the credibility of journalistic coverage as an antecedent of trust in news media, capturing judgments of the accuracy of the content.

Reciprocal Effects Between Hostile Media Perceptions, Credibility, and Trust in News Media

Researchers who theoretically conceptualize the relationship between evaluations of journalistic coverage and trust in news media understand trust as a rather stable psychological trait compared with credibility and HMP, which are adaptive to the situation depending on the news coverage and the different messages and sources (Dalen, 2019; Kim & Pasadeos, 2007). This reasoning is supported by authors who argue that trust in systems such as news media is rated based on evaluations of experiences with access points to the systems (Giddens, 1990). Access points can be persons perceived as representatives of the system or experience with the output of a system. With news media, the main access point is the journalistic content. How people evaluate experiences with journalistic coverage should, therefore, influence trust in news media. Similarly, rational choice approaches to trust argue that trust is heavily shaped by evaluations of the trustees in terms of their trustworthiness or the credibility of their messages (Kee & Knox, 1970; Sztompka, 2000). These theoretical arguments suggest that it is more likely to detect changes in issue-specific perceptions and evaluate their impact on trust than to detect changes in trust and evaluate their impact on issue-specific perceptions. Therefore, we assume that someone who perceives the coverage of an issue as being more hostile and less credible will lose trust in news media in general.

However, one could also argue that if people lose trust in news media in general, they will perceive issue-specific coverage to be more hostile and less credible. The effect of general attitudes spilling over to more specific attitudes is known in the context of general trust and trust in public institutions (Dominioni, Quintavalla, & Romano, 2020; Høyer & Mønness, 2016). Furthermore, in the literature on the spiral of cynicism, spillover

effects between different kinds of trust are conceptualized (Cappella, 2002). These arguments suggest that changes in general trust in news media could shape issue-specific attitudes toward media coverage.

Taken together, from a theoretical perspective, reciprocal effects between the constructs are conceivable, although most arguments suggest that context-specific perceptions should be antecedents of trust in news media.

Empirically, there is a lack of studies that longitudinally examine the causal order of the constructs. Most studies that consider the role of issue-specific perceptions of trust have been conducted in the context of hostile media research and have used cross-sectional data. Gaziano and McGrath (1986) noted that perceived partisan bias is an important aspect of building media distrust, and Fawzi (2020) found that HMP negatively influences trust in news media. Those who perceive their group to be treated unfairly will not expect the media to provide fair and accurate coverage and, therefore, will not trust the news media (Tsfati & Cohen, 2013, 2005b). However, how the perceived credibility of issue-specific coverage is linked to general trust in news media over time has yet to be examined.

In our study, we take the theoretical arguments and empirical findings on perceptions and evaluations of media content and their relationship with trust in news media as a starting point and explicitly address possible reciprocal effects. We therefore posit two hypotheses:

H1: Hostile media perceptions (a) and credibility evaluations (b) of immigration coverage predict trust in news media.

H2: Trust in news media predicts hostile media perceptions (a) and credibility evaluations (b) of immigration coverage.

With regard to the relationship between HMP and credibility ratings, low credibility ratings are commonly conceptualized as the outcome of the perception that the media is biased (Choi, Watt, & Lynch, 2006; McLeod, Wise, & Perryman, 2017; Tsfati & Cohen, 2005a). However, the alternative argument that HMP are an outcome of low credibility ratings is also theoretically plausible. For example, Giner-Sorolla and Chaiken (1994) argue that credibility ratings about the impartiality of the media might affect the perceived hostility of the media. We therefore ask:

RQ1: How are hostile media perceptions and credibility evaluations associated over time?

Methods and Measurements

Data

To investigate the relationship between issue-specific credibility, HMP, and trust in news media, we chose a time frame where an issue was extensively covered by the news media over several weeks. A representative three-wave online panel survey was conducted in the context of an immigration referendum in Switzerland in 2020 during the five weeks before the voting day, which is normally a period of extensive news coverage of an issue. The referendum on limited immigration was launched by the national conservative Swiss People's Party (SVP) and put to the vote on September 27, 2020, in Switzerland. The

aim was to end the free movement of people between Switzerland and member states of the European Union and to reduce immigration to Switzerland. Among the five referendums put to the vote on September 27, 2020, it received the most media attention during the 12 weeks before the polling day (Udris, 2020).

Quota sampling was applied with respect to age, gender, and language region. Wave 1 ($n = 1,300$; 50% female; $M_{\text{age}} = 48$, $SD = 15.60$; 49% higher education; 61% German-speaking Switzerland, 23% West Switzerland, 15% Ticino) took place on August 20–31, 2020; Wave 2 ($n = 973$; 48% female; $M_{\text{age}} = 49$, $SD = 15.88$; 49% higher education, 62% German-speaking Switzerland, 23% West Switzerland, 16% Ticino) on September 3–14, 2020; and Wave 3 ($n = 783$; 46% female, $M_{\text{age}} = 49$; $SD = 15.91$; 50% higher education, 61% German-speaking Switzerland, 23% West Switzerland, 15% Ticino) on September 17–28, 2020. A balanced sample of respondents who participated in all panel waves ($n = 723$) was used for the analyses².

Measurements

The measure of *trust in news media* was oriented toward performance-based understandings of trust in news media and, accordingly, operationalized by normative expectations and role perceptions of journalists based on Fawzi (2020). Respondents were asked to indicate to what extent they agreed or disagreed with 11 statements on a five-point scale from 1 (*I totally disagree*) to 5 (*I totally agree*). We computed the items in a mean index that showed excellent internal consistency (Cronbach's $\alpha_{w1} = 0.91$; Cronbach's $\alpha_{w2} = 0.92$; Cronbach's $\alpha_{w3} = 0.92$)³.

To measure perceived *credibility of the issue's media coverage*, respondents were asked to evaluate the media coverage on the issue based on pairs of opposites, selecting for each line the extent to which the left or right option was most applicable on a scale from 1 to 5. The selection of items was based on Meyer's (1988) widely used scale, which was proven to perform better than Gaziano and McGrath's (1986) scale (West, 1994). We computed the items in a mean index, which showed very good internal consistency (Cronbach's $\alpha_{w1} = 0.89$; Cronbach's $\alpha_{w2} = 0.91$; Cronbach's $\alpha_{w3} = 0.92$).

Four items were taken from Matthes (2013) and Schulz, Wirth, and Müller (2018) to measure *hostile media perceptions* and adapted to the referendum issue. We computed the items in a mean index, which showed very good internal consistency (Cronbach's $\alpha_{w1} = 0.89$; Cronbach's $\alpha_{w2} = 0.96$; Cronbach's $\alpha_{w3} = 0.83$).

To account for research examining the antecedents of credibility and HMP of issue-specific coverage (e.g., Flanagin & Metzger, 2007; Vallone, Ross, & Lepper, 1985), we included involvement and preexisting attitudes as control variables. Additionally, perceived knowledge and interest in the issue (e.g., Eastin, 2001; Vallone et al., 1985) play a role in judging news credibility and HMP. Therefore, we included all these variables as predictors of topic-specific attitudes toward media coverage in our analyses and measured them on a five-point scale from 1 (*I totally agree*) to 5 (*I totally disagree*).

² A dropout analysis comparing the means of all time-variant variables and the demographics with t-tests shows that respondents who did not participate in Wave 2 do not significantly differ from those who participated in both waves. The same holds true for those respondents who did not participate in Wave 3.

³ The wording of all items used for the indices is displayed in the Appendix.

Cognitive involvement with the issue was measured by two items following Matthes (2013). The internal consistency of the mean index used for the analysis was good (Cronbach's $\alpha_{w1} = 0.75$; Cronbach's $\alpha_{w2} = 0.74$; Cronbach's $\alpha_{w3} = 0.81$). *Affective involvement* with the issue was measured by three specific emotions, based on Arlt, Dalmus, and Metag (2019) and Matthes and Beyer (2017; Cronbach's $\alpha_{w1} = 0.76$; Cronbach's $\alpha_{w2} = 0.80$; Cronbach's $\alpha_{w3} = 0.82$). For *information processing involvement*, four items were taken from Matthes (2013) and Schemer, Matthes, and Wirth (2008): Cronbach's $\alpha_{w1} = 0.72$; Cronbach's $\alpha_{w2} = 0.75$; and Cronbach's $\alpha_{w3} = 0.80$).

Self-perceived knowledge of the issue was measured by two items (Cronbach's $\alpha_{w1} = 0.86$; Cronbach's $\alpha_{w2} = 0.84$; Cronbach's $\alpha_{w3} = 0.84$). *Interest in the issue* was measured by a single item. *Positive attitude* toward the limitation initiative was measured by four items. We computed the items in a mean index, which showed very good internal consistency (Cronbach's $\alpha_{w1} = 0.86$; Cronbach's $\alpha_{w2} = 0.86$; Cronbach's $\alpha_{w3} = 0.88$).

Furthermore, we included time-invariant control variables, regardless of the issue. The selection followed theoretical and empirical arguments based on research on the antecedents of trust in news media. Political trust was identified as an important predictor of news media trust (Hanitzsch et al., 2018). Political interest is positively (Tsfati & Ariely, 2014) and partisanship negatively (Lee, 2010) associated with trust in news media. *Political trust*, *political interest*, and *political orientation* were measured with single items.

Additionally, we included *sociodemographic* data (age, gender, and education) as control variables. *News media use* was measured by asking respondents how frequently they used different sources for information about current political affairs (Cronbach's $\alpha_{w1} = 0.66$; Cronbach's $\alpha_{w2} = 0.86$; Cronbach's $\alpha_{w3} = 0.71$).

Data Analysis

First, to test whether our measurement models on attitudes toward the media show satisfactory discriminant and convergent validity, we followed the approach recommended by Anderson and Gerbing (1988). We performed a confirmatory factor analysis (CFA) for all constructs using the data from wave 1 and tested the measurement model using constrained and unconstrained models. All models were estimated using structural equation modeling (see Appendix⁴ for means, standard deviations, and intercorrelations of the variables). We relied on the lavaan R-package (version 0.6-7; Rosseel, 2012) using maximum likelihood estimation with robust standard errors and a mean- and variance-adjusted test statistic (MLMVS) as the estimator. Missing data were imputed using a case-wise maximum likelihood estimation because the overall percentage of missing values was under the threshold of 5% (Kline, 1998).

To analyze our hypotheses on causal effects and the research question on the relationship between trust, credibility, and HMP, we calculated a series of fixed effects within-regressions (FE) using the R plm-package (Croissant & Millo, 2008). Trust, credibility, and HMP served as independent and dependent

⁴<https://www.dropbox.com/scl/fi/dhdnhcqalif6e96vphx42/Appendix.pdf?rlkey=t5qsv48gwno1pwmwjqqd2dqqf&e=1&dl=0>

variables to capture possible reciprocal effects.⁵ Fixed effects regressions rely on intraindividual variation only. By eliminating all stable differences between individuals from the estimation, whether measured or not, the bias resulting from omitted and confounding variables was reduced. Furthermore, fixed effects models estimate the independent variables' average effects within units over time and allow for causal inference (Allison, 2009; Wooldridge, 2010).⁶ Since all stable individual differences are automatically excluded in fixed effects models, the effects of time-invariant predictors, such as political interest, cannot be estimated (Allison, 2009). Therefore, we also ran random effects models, which include both interindividual and intraindividual variance. However, the random effects estimates will be systematically biased because of unobserved heterogeneity. Therefore, only the order of the estimates' strength is interpreted rather than the estimates' sizes. In other words, in the random effects models, we are only interested in whether time-invariant predictors play a significant role in explaining the dependent variables.

To further investigate RQ1 about the relationship among trust in news media, HMP, and credibility, we calculated a random intercept cross-lagged panel model (RI-CLMP; Hamaker, Kuiper, & Grasman, 2015) using Mplus version 8.4 (Muthén & Muthén, 2017). Maximum likelihood estimation with robust standard errors (MLR) was used, controlling for non-normality and missing values (Muthén & Muthén, 2017). The purpose of the model was to test for the causal order of trust in news media, the credibility of the issue's media coverage, and hostile media perceptions.⁷

For ease of interpretation, we z-standardized all variables in our models. Table 1 provides an overview of all time-variant constructs and changes in the items' mean values between the panel waves (see Appendix for standard deviations).

In the description of our results, we also included borderline significant *p*-values between .05 and .10 because we expected small effect sizes and the sample size to be limited due to dropout.

⁵ In the first analysis, we defined HMP as the dependent variable and credibility (RQ1), trust in news media (H1b), involvement, knowledge, interest, and attitudes toward immigration as predictors. In the second model, with credibility judgments as the criterion, we defined HMP (RQ1), trust in news media (H1b), involvement, knowledge, interest, and attitudes toward immigration as the predictors. In the third model, trust in news media was defined as the dependent variable and HMP and credibility (H1a) as the independent variables.

⁶ Clustered standard errors in the FE models account for the assumption of heteroscedasticity and autocorrelation of the residuals, leading to larger standard errors.

⁷ The RI-CLPM distinguishes the variables' variances at the intra-individual-level and the inter-individual-level. Causes and effects at the intraindividual level can be studied over time because the model controls for time-invariant individual differences by including random intercepts. In addition to autoregressive intraindividual effects, the models show the intraindividual correlations between the variables at all time points. Most importantly, they reflect the reciprocal relationship between variables over time—whether deviations in the individual's score from its mean in one variable at a first timepoint predict deviations in the individual's score from its mean in the other variable at a later timepoint (Hamaker et al., 2015).

Table 1. Time-Variant Variables' Means Change Over Time.

	Trust	Cred.	HMP	Att.	Cog. Inv.	Aff. Inv.	Proc. Inv.	Know.	Int.	Media Use
$W_1 M$	3.10	3.20	2.89	2.39	4.20	2.39	3.46	3.52	3.72	2.74
$W_2 M$	3.09	3.28	2.88	2.43	3.76	2.37	3.36	3.67	3.64	2.43
$W_3 M$	3.15	3.30	2.83	2.39	3.77	2.50	3.33	3.85	3.66	2.30

Note. Cred: Credibility; HMP: Hostile Media Perceptions; Att: Attitudes toward immigration; Cog.Inv.: Cognitive Involvement; Aff.Inv.: Affective Involvement; Proc.Inv.: Procedural Involvement; Know.: Knowledge; Int.: Interest in the topic.

Results

The CFA of the measurement model showed an overall very good model fit and met the limits proposed by Hu and Bentler (1999) for four fit indices ($\chi^2 p < 0.001$, CFI = 0.96, RMSEA = 0.05, TLI = 0.95, SRMR = 0.04). An analysis of the correlation matrix (see Appendix) showed initial evidence of the convergent and discriminant validity of the constructs⁸. To formally evaluate the discriminant validity, we followed the procedure recommended by Anderson and Gerbing (1988) and used chi-square difference tests for constrained and unconstrained models.⁹ We ran this test for every possible pairing of constructs in our study (see Appendix). All unconstrained models returned a significantly lower chi-square value, indicating a good discriminant validity of our constructs.

Answering the hypotheses and RQ about the reciprocal relationships among immigration coverage credibility, HMP, and trust in media, we relied on FE regressions and a random intercept cross-lagged model (RI-CLPM).

Looking at the causal effects, most of the theoretical considerations suggest that it is more likely that changes will be detected in the issue-specific perceptions of hostility and credibility and in their effects on general trust in news media (H1). Confirming H1b, an FE regression analysis with trust in news media as a criterion (see Table 2) shows that credibility influences trust. Judging the news coverage of the initiative as credible positively influences trust in news media in general over time. When taking time-invariant variables into account, credibility judgments remain the second strongest predictor after trust in politics. The assumption that HMP influences trust in news media (H1a) is not confirmed by our results. If people

⁸ The inter-factor correlations did not surpass the 0.45 level, which suggests good discriminant validity. The correlations of trust items with the credibility items range from 0.16 to 0.45. The correlations with the HMP items range from .17 to .37. The correlations between credibility and HMP items range between .34 and .51. The intra-factor correlations of trust range from 0.31 to .66, the intra-factor correlations of credibility range from 0.57 to .63, and the intra-factor correlations of HMP range from 0.50 to .69. The intra-factor correlations were in all cases higher than the inter-factor correlations which suggests a very good convergent and discriminant validity of the scales. However, all factor loadings were highly significant (see Appendix) and had the correct direction, indicating an acceptable convergent validity (Anderson & Gerbing, 1988).

⁹ In the constrained model, the covariance between the constructs is set to one. If the chi-square value for the unconstrained model is significantly lower, the discriminant validity is supported.

perceive the media to be hostile on the specific issue of the immigration initiative, this does not result in lower levels of trust in news media in general.

Table 2. Fixed and Random Effects Models Predicting Trust in News Media.

	Dependent variable:	
	Trust	
	Fixed	Random
Credibility	0.097*** (0.024)	0.213*** (0.019)
HMP	-0.020 (0.023)	-0.074*** (0.019)
Media use		0.024 (0.018)
Political ideology		-0.104*** (0.029)
Political interest		0.093** (0.032)
Political trust		0.322*** (0.028)
Age		0.096*** (0.028)
Education		-0.148** (0.056)
Gender		-0.036 (0.059)
Constant		0.104* (0.048)
Observations	1,985	1,799
R ²	0.022	0.237

Note. The entries can be interpreted as standardized coefficients with standardized errors in parentheses. R² represents the predicted variance within subjects. $n = 723$.

* $p < .10$ * $p < .05$ ** $p < .01$ *** $p < 0.001$

The FE regression with trust as the predictor (see Table 3) and trustworthiness as the criterion to evaluate H2b shows that general trust in news media is the strongest predictor of credibility judgments, and the effect size is higher than in the model using credibility as a predictor of general trust in news media. Additionally, affective involvement with immigration negatively and perceived knowledge positively predict credibility judgments, replicating previous research (Matthes, 2013). In the random effects model including time-invariant variables, political trust turns out to be the strongest predictor.

For HMP (H2a), the FE model did not show a significant effect of trust in news media. Only affective involvement positively predicted HMP. The other predictors failed to reach the significance level in the FE model. The results of the random effects model, including time-invariant characteristics, confirm that affective involvement significantly influences HMP. Contrary to the FE model, attitudes toward the issue are also highly significant and the second strongest predictor. This means that if we compare people with more positive attitudes toward the limitation initiative with people with negative attitudes, those with positive attitudes perceive the media to be more hostile. However, within individuals, this effect does not persist.

Both FE models for HMP and credibility explain only a small percentage of the variance. As time-invariant factors are controlled for in FE models, the remainders are produced by other intraindividual factors that change over time.¹⁰

To further explore the causal order of credibility and trust in news media, we performed a RI-CLPM. Generally, within participants, trust is less correlated with credibility than expected; we only found a significant correlation in Wave 3. Notably, the autoregressive effects of trust in news media were also not significant. One reason might be that the variance in trust in our field period was rather low. When analyzing changes within participants over time, only the effect of trust in Wave 2 on credibility in Wave 3 is close to the chosen significance level ($p = .065$). Therefore, H2b is rejected. This means that changes in trust do not spill over onto the evaluation of immigration coverage or the other way around. However, there nonetheless seems to be a development over time. The evaluation of the credibility of immigration coverage is independent of a general trust in news media in the beginning, but this change in Wave 3 where trust and credibility correlate significantly. How people judge news media in general and how the coverage of one specific item is evaluated seem to converge over time. Taken together with the findings on trust and credibility, we did not find evidence that credibility is an antecedent of trust, contradicting H1b. However, the initial evidence for the causal effect of trust on credibility is also weak, as the effect is outside the commonly accepted significance level.

Table 3. Fixed and Random Effects Models Predicting HMP and Credibility.

	Dependent variable			
	Hostile media perceptions		Credibility	
	Fixed	Random	Fixed	Random
Trust	-0.040 (0.041)	-0.130*** (0.027)	0.177*** (0.039)	0.333*** (0.024)
HMP			-0.244*** (0.027)	-0.369*** (0.020)
Credibility	0.266***	-0.416***		

¹⁰ Comparing the FE models with the RE models shows the systematic bias of the estimators in the RE models, which is rooted in unobserved heterogeneity (Singer & Willett, 2003; Wooldridge, 2010). This leads to higher effect sizes in the RE models.

	(0.029)	(0.024)		
Attitude	0.013	0.149***	−0.087	−0.065*
	(0.048)	(0.028)	(0.046)	(0.026)
Cognitive involvement	0.050	0.058*	0.039	0.041
	(0.031)	(0.026)	(0.030)	(0.024)
Affective involvement	0.060*	0.104***	−0.060*	−0.052*
	(0.029)	(0.023)	(0.027)	(0.022)
Procedural involvement	0.022	−0.035	0.016	0.004+
	(0.035)	(0.028)	(0.034)	(0.026)
Knowledge	0.011	0.057*	0.062*	0.093***
	(0.033)	(0.026)	(0.031)	(0.024)
Thematic interest	0.004	0.007	0.012	0.010
	(0.008)	(0.008)	(0.008)	(0.008)
Media use	−0.003	0.002	0.029	0.026
	(0.030)	(0.022)	(0.029)	(0.020)
Political ideology		0.031		−0.040
		(0.030)		(0.026)
Political Interest		0.038		0.012
		(0.032)		(0.028)
Political trust		0.006		0.071**
		(0.028)		(0.024)
Age		−0.013		−0.042
		(0.026)		(0.023)
Education		−0.009		0.018
		(0.051)		(0.045)
Gender		−0.007		−0.013
		(0.054)		(0.047)
Constant		−0.009		−0.028
		(0.049)		(0.044)
Observations	1,907	1,751	1,907	1,751
R ²	0.076	0.300	0.106	0.420

Note. The entries can be interpreted as standardized coefficients with standardized errors in parentheses. R² represents the predicted variance within subjects. $n = 723$.

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < 0.001$

To examine RQ1, we used the results of the FE models (Table 3) and the RI-CLMP (Table 4). Overall, the results of the RI-CLPM show that among participants, credibility and HMP are significantly correlated in all waves. Perceiving coverage as hostile is associated with lower levels of credibility judgments. In the FE models, HMP is the strongest predictor of credibility ratings, whereas credibility is the strongest predictor of HMP. Looking at the causal effects between HMP and credibility in the RI-CLPM, only one effect of HMP on credibility is close to the chosen significance level ($p = .072$). The

individual's Wave 2 deviation from her or his own score in HMP predicts the Wave 3 deviation from her or his own score in credibility. Answering RQ1, there does not seem to be a clear pattern of causal relationships between HMP and credibility. Instead, we should think of HMP and credibility as evolving together over time.

Table 4. Standardized Estimates for the RI-CLPM.

	<i>B</i>	<i>SE β</i>
Cred _{W1} → Cred _{W2}	0.202⁺	0.112
Cred _{W2} → Cred _{W3}	0.284**	0.095
HMP _{W1} → HMP _{W2}	0.183*	0.092
HMP _{W2} → HMP _{W3}	0.273**	0.083
Trust _{W1} → Trust _{W2}	0.165	0.135
Trust _{W2} → Trust _{W3}	0.149	0.113
Cred _{W1} → HMP _{W2}	−0.015	0.089
Cred _{W2} → HMP _{W3}	−0.030	0.077
Cred _{W1} → Trust _{W2}	0.002	0.063
Cred _{W2} → Trust _{W3}	0.055	0.080
HMP _{W1} → Cred _{W2}	−0.031	0.097
HMP _{W2} → Cred _{W3}	−0.119⁺	0.066
HMP _{W1} → Trust _{W2}	0.018	0.056
HMP _{W2} → Trust _{W3}	0.012	0.074
Trust _{W1} → Cred _{W2}	−0.057	0.184
Trust _{W2} → Cred _{W3}	0.169⁺	0.091
Trust _{W1} → HMP _{W2}	0.083	0.164
Trust _{W2} → HMP _{W3}	−0.057	0.093
Trust _{W1} ⇔ HMP _{W1}	−0.030	0.031
Trust _{W1} ⇔ Cred _{W1}	0.028	0.035
Cred _{W1} ⇔ HMP _{W1}	−0.193***	0.051
Trust _{W2} ⇔ HMP _{W2}	−0.014	0.033
Trust _{W2} ⇔ Cred _{W2}	0.049	0.038
Cred _{W2} ⇔ HMP _{W2}	−0.091*	0.047
Trust _{W3} ⇔ HMP _{W3}	−0.005	0.020
Trust _{W3} ⇔ Cred _{W3}	0.071***	0.019
Cred _{W3} ⇔ HMP _{W3}	−0.076**	0.025
Trust _{between} ⇔ HMP _{between}	−0.394***	0.045
Trust _{between} ⇔ Cred _{between}	0.522***	0.047
Cred _{between} ⇔ HMP _{between}	−0.436***	0.056

Note. $\chi^2(3) = 9.998$ ($p < .05$); RMSEA = .057; CFI = .998; TLI = .970; SRMR = .016. $n = 723$.

⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < 0.001$

Discussion

In our study, we examined the interplay between evaluations of news media coverage of an immigration initiative in Switzerland and general trust in news media. Previous research on trust in news media has mostly focused on the characteristics of recipients as trustors and has attempted to identify which characteristics predict trust (Jakobs et al., 2021). Studies on how evaluations of experiences with the journalism system affect trust tend to be the exception. Yet, against the backdrop of the trust literature in interpersonal contexts (Endreß, 2002), it is highly plausible that, for example, a negatively rated experience with journalism contributes to a lower level of trust. Following this logic, our study asked how evaluations of the coverage of an issue that dominates the media affect general trust in news media. In other words, does trust in the media decline when people perceive issue-specific coverage as untrustworthy and hostile?

Thus, our study focuses on the coverage of an immigration initiative as an issue and asks whether a spillover effect occurs; that is, that overarching attitudes are influenced by ratings of a specific coverage over time if it is a dominant issue in the coverage and relevant for individual political decision making.

Our results on the relationship among HMP, credibility, and trust over time showed only one consistent result: Changes in trust do not affect HMP, not the other way around. Examining the relationship between credibility and trust, our analyses showed mixed results. Trust in news media is significantly predicted in an FE model by the perceived credibility of immigration coverage. However, trust in news also turned out to be a significant predictor of credibility judgments. The effect size was higher in the model using trust as a predictor. This suggests that there is a correlation between the evaluation of coverage on a single issue and general trust in news media, which could be interpreted as a spillover effect at the individual level. In the RI-CLPM, trust and credibility did not correlate significantly in W1 and W2, but at the third time point. Looking at longitudinal effects, the individual's Wave 2-deviation from her or his own score in trust predicts the Wave 3-deviation from her or his own score in credibility on a 0.10 significance level. Taken together, both the results of the FE models and the RI-CLPM show initial evidence that changes in trust in news media (triggered by other factors) within the study period are reflected in the evaluation of issue-specific coverage. However, the results must be interpreted with caution because the effect in the RI-CLPM is just outside the commonly used significance level of 0.05 and has to be validated in future studies.

With regard to trust research, our study supports the conceptualization of trust as a rather stable factor (Dalen, 2019). The level of trust in our study period did not change much on an aggregate level. Additionally, situational dependent factors, such as credibility judgments or HMP, did not explain the changes in trust that occurred on the individual level. The fear that people are influenced in their general trust by volatile judgments of issue-specific media coverage seems to be unfounded. Instead, we detected changes in general trust in news media, which spilled over to how people judged the credibility of issue-specific coverage.

This has several implications for trust, hostile media, and credibility research. For research on the credibility and perceived hostility of news media, this means that trust should be conceptualized as a predictor that causally influences context-specific perceptions alongside context-specific variables, such as involvement in or attitudes toward an issue. For trust research, our results suggest that trusting the media does not seem to depend on evaluations of current news coverage. Instead, trust seems to be a heuristic

for evaluating news coverage on a specific issue. If the level of media trust decreases, evaluations of issue-specific coverage also become more negative.

The study has some limitations that must be considered when interpreting the results. First, the study period of one month is rather short for investigating the effects on such a fundamental construct as trust in news media. The missing autoregressive effects and the low within-variance of trust support this assumption. Even if the entire cycle of reporting on the limitation initiative can be mapped, the effects may be more pronounced for issues that dominate coverage for longer periods.

Second, the chosen issue might be decisive. Immigration was shown to score low on peoples' assessments of issue-specific news coverage (Tsfati et al., 2022). Our results may therefore be specific to the issue, and other issues might have produced different results. As we already chose a controversial issue, expecting the probability of spillover effects to be highest, we do not expect effects of evaluations of issue-specific coverage on trust in news media for different issues. However, if coverage of a specific issue bluntly violates these expectations and is perceived as untrustworthy or biased, it may also influence general trust in news media. This might be the case for scandals or the coverage of highly politicized issues, such as the war in Ukraine or COVID-19. Furthermore, the assigned importance of an issue for each individual and the intention to vote in the referendum might be important moderators for the relevance evaluations of issue-specific coverage can gain for media trust. In future studies, the research design could ask respondents about the most important issues from their points of view and use these issues to investigate evaluations of issue-specific coverage and their effect on media trust.

Third, the study examines the relationship between issue-specific reporting and trust in news media in Switzerland in the context of a referendum. Because of the direct democratic system, the information presented in the media on the issue may be judged to be more relevant for opinion formation because there is an actual election. Thus, media information on issues related to a referendum may have a higher value than reporting on other issues in other systems. This makes the results only conditionally transferable to other democratic systems.

Fourth, the FE models show that the included predictors can explain only a small part of the intraindividual variance. Although this is not unusual for FE models, further studies that address other time-varying factors that influence trust in news media are potentially worthwhile. The RE model shows that the influence of changes in political attitudes in particular, such as political trust, might be relevant.

Overall, the study showed that trust in news media is weakly influenced by evaluations of issue-specific coverage. Instead, there seems to be a spillover effect of more global trust in news media on issue-specific evaluations of news coverage, which increases over time. With regard to the causal order of the constructs, however, our study could only provide initial indications that need to be investigated in future longitudinal studies. Future research on trust could further explore the relationship between issue-specific and generalized attitudes in the context of issues such as economy or could compare issues about their contribution to generalized trust in news media.

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