Policy or person?

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Policy or person? What voters want from their representatives on Twitter

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A R T I C L E I N F O

A B S T R A C T

Social media have the potential to transform democracies as they allow for direct contact between representatives and represented. Politicians can use social media to show their policy positions but they can also give insight into their private lives. Based on survey experiments in Germany and Switzerland we show that social media messages about politicians' private lives rather deter voters. Instead, we find that voters prefer candidates that communicate policy positions. The effect of a policy-oriented communication style on Twitter can even lead to appreciating a politician from a different party in Switzerland, which has an electoral system that gives a strong incentive to cultivate a personal vote.

Social media platforms like Twitter, Facebook and Instagram carry the potential to transform democracies as they allow for direct communication between politicians and citizens without the interference of traditional media or the party. Using social media, politicians can choose freely what they want to convey to voters. This direct form of communication does not only allow more direct but also varied contact between representatives and the represented. Different styles should lead to different effects: social media can either be used as a vehicle of self-promotion (Jackson and Lilleker, 2011) or to improve the bonds between voters and representatives in the sense of a more connected representation (Graham et al., 2016). For both purposes, politicians may, on the one hand, communicate policy positions and political activity (Russell, 2018) or they may on the other hand display a personal picture of themselves to humanize themselves and increase their likeability (Lee and Shin, 2012; Lee et al., 2018). While both seem reasonable strategies, their consequences for the functioning of democracy are fundamentally different: a *policy style* can be seen as enhancing informed linkages between citizens and politicians and thus counteracting the perceived alienation between political elites and citizens. The *private style* seems less favourable from a substantive representation point of view as voters should appreciate politicians that represent their policy

preferences. However, it might nevertheless be a valuable strategy to appear more relatable (Kruikemeier, 2014), intimate, and authentic (Lee et al., 2018) to voters.

We believe that deeper insight into the democratic potential of Twitter requires an enhanced understanding of the content of tweets. To do so, we need to focus on the strategies that legislators employ when using social media to communicate with their voters and in particular whether they are appreciated among citizens. In this study, we argue that a policy-oriented style should be what voters appreciate most while a strategy focusing on private affairs is less popular.

This study examines these questions with a rigorous design and testifies that policy-oriented and not privatized tweets hold more potential to get votes. In addition, we present evidence from a pilot observational study among Swiss and German politicians which provides external validity for our findings.

Our results indicate that social media has positive potential for representational linkages. We show that voters differentiate quite clearly: they report a relatively low willingness to vote for politicians that post privatized tweets in comparison to policy tweets. Politicians that tweet policy-based messages are considered significantly and substantively more likely to be voted for. Our results furthermore suggest

this effect to be quite strong: posting policy tweets can even attract voters from other parties. This holds in particular for Switzerland which is a system that gives representatives a strong incentive to cultivate a personal vote (Selb and Lutz, 2015).

Our paper proceeds as follows: after outlining general considerations on social media and linkages between voters and representatives we present our theoretical approach which expects that a policy-oriented tweeting style is a more successful strategy to obtain votes. In the empirical part, we detail our survey experiment where Swiss and Germans voters evaluate a Twitter feed from a fictional candidate. In our conclusion, we reflect on the meaning of our findings for how we see the role of social media in modern democracies and discuss further avenues for research.

1. Social media and the new direct relationship between voters and representatives

Social media such as Twitter and comparable Web 2.0 tools are widely used tools by politicians and candidates (for an overview of the use of social media see Jungherr, 2016). Also, citizens increasingly use social media to inform themselves about political matters (Nielsen and Schrøder, 2014; Feezell, 2018; Bakshy et al., 2015). In this new arena of unmediated public communication (Larsson and Moe, 2012) politicians use social media to speak to their voters, especially because these tools allow for communication without an intermediary filter such as the traditional media or the party (Golbeck et al., 2010; Grant, Moon and Busby Grant, 2010; Larsson, 2015; Strandberg, 2013). Without these filters, politicians can directly appeal to certain audiences at all times. Hence, social media channels have become a cheap and easy to use communication channel where politicians can signal positions, claim credit and create an impression of themselves (Hemphill et al., 2021; Russell, 2018).

Recent evidence documents that in certain instances increased social media use is associated with better electoral performance (Kruikemeier, 2014), it also translates into more citations in the traditional media (Hong and Nadler, 2012; DiGrazia et al., 2013), yet the effect seems context-dependent (Jungherr, 2016). Hence, while the literature suggests that voters are affected by politicians' social media behaviour, we still lack a deeper understanding of which style of communication has which effect. In fact, we have no clear idea how and by which mechanisms voters' perceptions of politicians are influenced through the information and images available on social media.

Politicians have to choose **how** to use their social media communication channel: on the one hand, politicians may use Twitter to state and comment on policy positions to show which positions and values they represent and to which topics they dedicate their attention inside and outside parliament (Hemphill et al., 2021; Fountaine et al., 2019). While doing this they are free to autonomously choose which features of their person and private lives they want to display to voters. Politicians can also present a more personal, direct and likeable image of themselves to an online audience in contrast to TV, radio and print news where journalists decide to a large extent in which way a politician is presented. Social media is hence a unique context for self-controlled impression management.

2. Choosing your twitter strategy: policy-oriented or private tweets

When using social media to communicate with **voters politicians** can follow two broad motivations.[1] The clear reference to voters is

crucial for our framework rooted in exploring representational linkages between politicians and voters. We thus theorize that on the one hand, they may want to inform voters about policy and present themselves as hard-working politicians taking care and solving the problems of the constituents. The outcome of such a strategy will be social media content that is focused on policy, i.e. information about policy positions such as comments on drafts of bills or on current political developments. Another, competing motivation will be the desire to portray oneself as an ordinary citizen and to share private content in order to reduce the distance between themselves as a member of the political elite and regular citizens. The outcome of this latter strategy will be more private tweets, for example focusing on leisure activities and family.

3. Why a privatized style could be a successful strategy

This focus on *private* refers to a phenomenon discussed as "privatization" in communication research (see e.g. Van Aelst, Sheafer and Stanyer, 2012). It relates to the longstanding debate about personalization[2] in political communication which received a new boost with the arrival of social media (Holtz-Bacha and Kaid, 2014). The concept of privatization delineates a politician as an ordinary and relatable person and describes the shift from public to personal aspects of a politician. It includes a focus on the private life of politicians such as family, life, personal history or hobbies (Van Aelst, Sheafer and Stanyer, 2012). By more privatized tweets politicians try to humanize themselves (Kruikemeier et al., 2013) and to present a more relatable (Lalancette and Raynauld, 2019; Page and Duffy, 2018) image in order to "reduce the distance between voters and their representatives portraying these not only as political actors but also as 'ordinary people' (Pedersen, 2016,:2).

Some empirical studies on different social media networks seem to go in line with private styles on social media: Kruikemeier and her co-authors (2013) show for example that interactive and personalized online communication including information on private lives increases citizens' political involvement, political interest and voter turnout (Kruikemeier et al., 2013). More recently, Metz et al. (2019) examined privatization strategies on Facebook and found that emotional and private content yields positive effects on audience engagement. Also, two studies conducted in South Korea about the effects of private post on Twitter and Facebook shed light on the psychological effects of privatized or de-personalized messages. Their results suggest that more personalized and private communication draws more attention, better information processing and thus could evoke stronger feelings of closeness to the respective candidate (Lee and Shin, 2012; Lee et al., 2018). Based on these findings one would expect that messages about their private life lead to more positive evaluations of politicians (see Meeks, 2017; Gerodimos and Justinussen, 2015; Metz et al., 2019) but we should be clear that these evaluations rarely focus on the likelihood to vote for a candidate.

However, for reasons we outline below, we doubt whether the privatized strategy leads to success and we outline in the following paragraph why we expect a policy-oriented style to be more successful.

4. Why a policy-oriented style should be a successful strategy

Despite the potential appeal of privatized tweets, privatization can be seen as a threat to democracy since voters may focus too much on candidates' styles or their 'attractive packaging' instead of their

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[1] Clearly, there could be other motivations, e.g. signalling internal party networks or alliances. However, since our focus is on representational linkages, we focus on communication with a clear link to voters and thus refrain from theorizing such incentives further.

[2] In general, personalization studies analyze whether politicians as persons receive more attention than the party or other collective political actors (see e. g. Graham et al., 2017; McAllister, 2007). Another frequently used concept is individualization which refers to a focus on individual politicians including their ideas, capacities and politics. Here, no clear shift to less policy-oriented or less substantial themes is expected (Van Aelst, Sheafer and Stanyer, 2012), so we refrain from discussing this concept further.

professional capability (Adam and Maier, 2010). While *private* tweets may lead to a positive approval, we argue that voters should expect and appreciate *policy* signals even more for two reasons: The relevance of candidate competence and the high value of substantive policy representation. First, based on a large body of voting choice literature which established the importance of candidate competence in voters' decision for which politician to vote (Aarts et al., 2013; Campbell and Cowley, 2014; Cowley, 2013; Cutler, 2002; Garzia and De Angelis, 2016; Green and Hobolt, 2008; Lanz and Sciarini, 2016; Arzheimer et al., 2016) we expect that voters disapprove of privatized tweets. Information about leisure and hobbies may signal that parliamentarians do not focus on their main task representation and legislation - but that they spend time on presenting themselves in a non-substantial manner instead.

Second, substantive representation, i.e. the link via policy preferences, is very relevant for votes. Representation studies show that voters value substantive representation, i.e. policy-oriented forms of linkage with politicians acting in their interests (e.g. Bengtsson and Wass, 2010; Rosset et al., 2017; Ferrìn and Kriesi, 2016). Empirical evidence for the idea that voters value policy over private information has also been found in studies of voters' reactions on privatized versus personalized reporting in traditional media about politicians. Jebril, Albaek and De Vreese (2013) for example show that a focus on politicians as private individuals increases peoples' cynicism about politics. With policy-oriented tweets politicians can present themselves as active and engaged; previous literature has shown that they increasingly do so to reach out to a broader constituency (Straus et al., 2013), particularly during election campaigns (Hegelich and Shahrezaye, 2015; Hermans and Vergeer, 2013; Lilleker and Jackson, 2014; Vergeer et al., 2013; Larsson and Kalsnes, 2014).

Correspondingly, we expect voters to prefer politicians who deal with policy issues and appear hence more substantial.

Based on these considerations, we suggest the following hypothesis:

Hypothesis 1. Respondents report a higher willingness to vote for politicians whose tweets have a policy-specific style than for those that have a privatized style.

Below we describe our case selection and present the results of the survey experiment that tests our hypothesis.

5. Case selection

We focus on Twitter communication because Twitter has been found to be particularly suitable to study online representational politics because it can be seen as the platform with the most 'democratic potential' (Kruikemeier et al., 2014; Wuest et al., 2019). Particularly in Switzerland political debates are most intensely debated on Twitter (Gilardi et al., 2020), and also for Germany we know that politicians use Twitter for commentary of policies while Facebook is rather used to mobilize Facebook users to attend campaign events (Stier et al., 2018). This renders Twitter particularly suitable for investigating the relationship between the elected and voters (Rauchfleisch and Metag, 2016). Furthermore, the number of Swiss and German parliamentarians using Twitter is increasing steadily underlining the importance of Twitter in communication between parliamentarians and voters. Moreover, on Twitter politicians cannot only communicate directly to voters but the platform is also more commonly used by journalists, who follow Twitter closely and incorporate it in their traditional journalistic coverage. As such, parliamentarians can reach an even wider audience on Twitter (Jungherr, 2014) than they can on other social media platforms.

We study Switzerland and Germany since these two cases offer variation on relevant interesting variables such as the election system, the importance of parties and the professionalization of the parliamentary system. This enhances the generalizability of our findings. In particular, the election system in Switzerland and Germany offer variation when it comes to the incentive to cultivate a personal vote (Selb

and Lutz, 2015). While Germany offers the opportunity to vote for a candidate with a majority voting system with a first vote and for a party in a proportional system with a second vote, the Swiss election system also encompasses majority voting for their representatives of the Upper House ("Ständerat") and for those small election districts who have only one representative in the Lower House ("Nationalrat"). Moreover, the Swiss system allows to split and accumulate votes so that voters can name a candidate on their ballot from another party or can list a name twice. Based on previous research which showed that politicians particularly used Twitter to stand out next to their competitors in tight races (Evans et al., 2014; Meeks, 2017), we think that politicians use social media particularly in election systems that allow personal votes such as the Swiss system. Hence, we have comparable election systems across countries but also a variation with regards to the incentive to cultivate a personal vote (Carey and Shugart, 1995) which is highest in the case of Switzerland. Another interesting variation between the countries concerns the role of parties. We know from work by Arzheimer (2012) that party identification is of particular importance in Germany in contrast to Switzerland. This allows us to study whether party identification and its strong role in the perceived willingness to vote for a politician may be impacted by a politician's social media behaviour. In particular, we are interested to find out how important the self-impression management of politicians is when compared to party identification, which is a key influencing factor for vote choice. Finally, both countries vary strongly according to the level of professionalization of their parties (Giger et al., 2011; Ladner, 2008; Niedermayer, 2006) and parliament (Z'graggen and Linder, 2004), with parties and parliaments in Germany being more professional than their Swiss counterparts. This might offer additional variation in terms of how professionalized the social media behaviour of politicians typically is in the countries of our respondents.

Please note that, given the multiple streams of institutional and political variation between the two countries as described above, we need to be very cautious in interpreting potential country differences as causally related to one specific factor. However, we are convinced that at the very minimum, testing our expectations in two different settings enhances the generalizability of our findings and potential differences give food for thought to explore institutional differences in a more rigorous way in future research, also expanding on other important institutional variation as the electoral system.

6. Method

As a pilot, we first collected a small (n = 1739) sample of tweets sent by Swiss and German members of parliament. This helped us to design realistic manipulations for the survey experiment at the core of our analytical strategy.

6.1. Sample and design

The target population for our survey experiment are Swiss and German adult citizens that use social media in their everyday lives to ensure a certain familiarity with the treatment presented to them in this study. Paid participants were recruited via the survey company 'Respondi'. From a total of 5251 respondents, N = 4358 were included in our analytical sample.[3]

Our experiment roughly follows a cross-nested three (tweet content: *private, policy general, policy specific*) by two (*male politician, female*

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[3] 893 respondents had to be excluded from our analytical sample for a variety of reasons. Some did not finish the survey (326 respondents). Others were not users of social media (527 respondents). 24 additional respondents failed an attention check. Finally, 16 respondents did not clearly identify with one gender. Instead of erroneously assigning them a gender, we decided to exclude them from our analysis.

politician) by two (*party match, party mismatch*) between participants' design. Furthermore, within the private tweet condition, respondents either saw a tweet *with or without a picture* and within the policy-specific condition, respondents either saw a *neutral, left or right-leaning tweet*. For details on this purposefully relatively widely scoped design see Fig. 1 below.

Of our total sample, 2158 (49.5%) were Swiss and 2200 (50.5%) were German. Among the Swiss respondents, 1322 (61.3%) were German-speaking and 836 (38.7%) were French-speaking. This roughly corresponds to the shares in the Swiss population speaking the respective language. Their ages range from 18 to 72 years (average = 44.78, SD = 14.18). 51.8% of the sample is female. In terms of education, 60.12% (n = 2620) has completed mid-level education, 30.06% (n = 1335) were higher educated while 9.24% (n = 403) were lower educated (see the appendix for more details).

6.2. Procedure

Respondents completed the survey online in their preferred language. Using Qualtrics as our survey software, respondents first answered a set of pre-treatment questions about their *age, gender, level of education, social media usage, political ideology*, and *party affiliation*. We then presented our key manipulation. Each respondent was shown a profile of a fictitious politician including - similar to what this looks like in real life - some basic information on his or her party affiliation and **one** set of **three** tweets from this politician, see Fig. 2 for an example. Crucially, this *tweet series* varied in its degree of privatized versus policy content. We furthermore varied whether or not a politician is a *member of the respondents' preferred party* and if his/her tweet series expressed *left- or right leaning ideology*, more details below. Following the manipulation, participants completed a number of items that tapped into their appreciation of the presented politician, including our key dependent variable: their willingness to vote for the presented politician after observing his or her profile (gender and party) and tweeting behaviour.

7. Manipulations

Primary tweet-series manipulation: private⟸⟹policy Our focal manipulation is the *tweet-series* respondents saw (see Fig. 2 for an
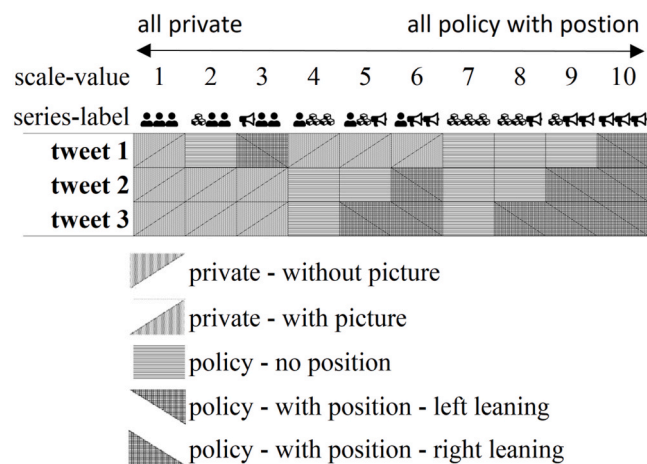
Fig. 1. All combinations* of private and policy tweets included in the tweet-series** that we presented to respondents and the resulting ten point 'private-to-policy' scale.

* From top to bottom: private-life (👤), general policy (🚲), policy with a distinct (right-leaning) position (📢).

Fig. 2. Example of tweet series.

example). Fig. 1 illustrates the variation offered in our design graphically. We present respondents a diverse set of tweet-series that vary in their degree of privatized versus policy content. Each respondent saw one set of three tweets. Each of these tweets could have one of three styles: they could be about the private life (👤) of a politician,[4] they could be in general about policy (🚲)[5] or they could be about policy with a

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[4] The following text was used for the private-style tweets (translated from French and German): "*Sunshine and a good book: it doesn't take more than that to really switch off once again! #Weekend #Nature #Refuel*" and "*Catching some fresh air, changing perspective. Wishing everybody a wholesome weekend!*" and "*Today was a beautiful day, enjoyed it greatly during a stroll with my family! #family #Sunday #Sun.*"

[5] The following text was used for the general policy tweets (translated from French and German): "*How can our #healthcare system be made more effective in the long run? We will try to answer this question at this evening's panel discussion.*" and "*Instead of all fighting for our own interest we should start with a discussion of how we can make our #healthcare system better*" and "*It is about time that we do something about the down-ward trend in #pension supply for our elderly.*"

distinct position (📢).[6]As specified below, policy tweets could either be left-leaning or right-leaning. To avoid a mixed message, if a presented tweet series contains two or more tweets with a policy position, they are always either **all** left-leaning or **all** right-leaning.

We used healthcare and pensions as our policy topics since we know from voter surveys that both topics are highly salient in both countries (Lutz and Pekari, 2015).

The presented design includes the decision to statistically control for some aspects of the tweet series rather than through full randomization (e.g. the presence of a *picture* and if tweet series are *left- of right leaning*). A key motivation for us in adopting a design that includes aspects of 'conditionally independent randomization' (for a detailed discussion see Hainmueller et al., 2014) was a desire to present realistic tweets-series to all respondents (i.e. ecological validity). In a classic or conjoint design with full randomization, we would have to present combinations that do really make sense together (for example a private tweet that revealed a left-right position). A second advantage of the presented design is that it contains a relatively wide variety of tweets and topics. This diversification of treatments means that we can be surer that respondents indeed prefer one style over another (i.e. generalizability) in the two investigated countries. If we had instead opted for a more simple design (e.g. series 👥📢 VS 👥📢📢) our study would have been more vulnerable to the critique that its results be driven by a particular (dis)liked (combination) of tweets.

For our analysis, we rank-order the developed permutation of different tweets on a *private-to-policy-scale* from 0 to 10. On the one extreme of this scale (scale-value 0), we find three tweets with only private life content. On the other extreme, we find three[7] tweets which all contain policy content with a distinct policy position (scale-value 10). We use this *private-to-policy-scale* as the key independent variable in our regression analysis.

Secondary tweet-series manipulations Next to the private to policy dimension we manipulated three more secondary dimensions. First, to mimic the real-life situation on Twitter, in which users very often use graphical content, in half of the private style tweets we include a matching picture (of a book, mountain, or forest path, see the appendix). Second, to offer a comparison with ideology as another well-known dimension of vote-choice, policy tweets with a distinct policy position could either be *left-leaning*[8] or *right-leaning*.[9] Third, our design means that there are also some tweet series in which all the tweets were from the *same style* (e.g. all private). This feature can be used to see if respondents prefer a 'mixed' tweeting style.

Match characteristics Another key aspect of our design is our desire to make statements about the relative importance of private versus policy-oriented social media content versus already well-established dimensions of vote choice. To achieve this goal, we included three more dimensions. The first of these is a *party (mis)match*. Dynamically using available information on respondents' preferred party from the pre-treatment measurements, we presented half of our respondents with a politician that either *was* (match, value = 1) or *was not* (mismatch, value = 0) a representative of their preferred party. Using some simple survey programming, half of the respondents saw a politician from the respondent' preferred party (i.e. their answer earlier on the survey). The other half saw a politician from a random other party in the list. The second main dimension of comparison is the extent to which the left-right orientation of the politician matches the left-right orientation of the voter.

There is a mismatch when the voter is right-leaning[10] as revealed in the pre-treatment measures while the content of the tweet-series is left-leaning or vice-versa. This setup allows us to compare the effect size of seeing either private-life or policy-oriented tweets on two well-established dimensions of voting behaviour (party and ideology) (e.g.). We finally also varied the gender of the politician. This measures the impact of a *gender match* (i.e. if voters prefer to vote for politicians that mirror their own gender, (e.g. Giger et al., 2014). Overall voters do like to vote for women as confirmed by Black and Erickson (2003). However, recent research has also found that high-quality women tend to lose to high-quality men in open-seat races (Barnes et al., 2017). Varying gender also allows us to see whether Swiss or German voters prefer male candidates and if the preferred communication style in terms of private versus policy differs depending on politician' gender.

Fig. 2 presents an example of the intervention with a combination of private and policy-oriented messages.

8. Measurements

Pre-treatment measurements: respondent characteristics we measured *age* in years. Our *gender* measurement included, next to male and female a gender-fluid category. The *level of education* was measured following country-specific ISCED (International Standard Classification of Education) items (see the appendix). For our analysis, we collapsed these into the three main categories of *low*, *middle* and *high*. To get respondents' *party affiliation* we asked: 'what party would you vote for if there were elections next Sunday'. The answer options included nine (Switzerland) or seven (Germany) main political parties.[11] The *left/right ideological preference* of respondents was measured by asking respondents to position themselves on a left-right scale with a slider (0: most left $\Longleftrightarrow$ 10: most right, average = 4.76, SD = 2.25). Social media behaviour was measured generally (*frequency of use*) as well as specifically in terms of whether or not they *saw any political content on social media in the last month*, and whether they *follow a politician* on social media.

Post-treatment measurement: willingness to vote for the presented politician The key dependent variable in our analysis is the perceived willingness to vote for the presented politician on basis of his/her gender, party-membership and tweeting style. We asked respondents "*after seeing these tweets, we would like you to judge [name of politician]. Please let us know how strongly you agree with the following statements. While answering these question, please focus on the information currently visible, including the content of the tweets you've just read*". The key dimension we use in our analysis is the perceived willingness to vote

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[6] The following text is an example of the text that was used for the policy tweets with a distinguishable policy position (translated from French and German): "*Those who pay more should also receive more! We should introduce a #performance principle into our health-system.*" and "*The new surplus in federal tax revenue should flow entirely into old-age #pensions. Old-age #pensions are a key pillar of our #social-welfarestate. This should be strengthened.*" and "*Accessibility should be the leading principle in our #health-system. We demand #solidarity so costs can be shared and the system can be made fair*".

[7] Please note that the number of the number of likes and retweets shown to participants is stable across all tweet series. It always was: 1 retweets and 87 likes for this 1st tweet, 7 retweets and 85 likes for the 2nd tweet, and 4 retweets and 98 likes for the 3rd tweet, independent of its further content.

[8] The content we used the left-leaning tweets was "The new surplus in federal tax revenue should flow entirely into old-age pensions. Old-age pensions are a key pillar of our social welfare-state. This should be strengthened" and "Accessibility should be the leading principle in our health-system. We demand solidarity so costs can be shared and the system can be made fair" and "Today I discussed old-age care with my colleagues at our party meeting. Conclusion: solidarity is key!".

[9] The content we used for the right-leaning tweets was "*The natural thing to do with the new surplus in federal tax revenue is a tax-reduction for all*" and "*Those who pay more should also receive more! We should introduce a performance principle into our health-system.*" and "*Today I discussed old-age care with my colleagues at our party meeting. Conclusion: who pays more should also receive more!*".

[10] We consider a voter right leaning if she has a left/right score above our sample mean of (M = 4.79, range 0–10 and left-leaning otherwise.

[11] The answers given generally match the results from the last national elections in both countries (available upon request.

for the presented politician as this is what counts in the end: "*I can imagine voting for this politician in the upcoming elections*". Respondents answered this question with a slider (0: completely disagree ⟸⟹ 100: completely agree, M = 51.21, SD = 23.95) that had the neutral default value of 50. Please note that this self-reported willingness to vote for a politician was selected from a wider set of alternative measurements, all of these turned out to be strongly correlated. Online appendix H shows the highly similar results with these alternative candidate evaluation measurements.

8.1. Modeling strategy

Our empirical analysis is focused on the impact of the tweet-series and match characteristics. Comparing the size of the beta-estimate of the match-characteristics with the beta-estimate of the private-to-policy-scale gives us a reference to make a statement about the *relative* importance of a tweeting style. We included a range of standard covariates in the regression models and show a regression model with a wider selection in online appendix E.

The conditionally independent randomization of our manipulations (with pictures only occurring within private-tweets and left-right positions only occurring within specific policy-tweets) means that multicollinearity needed to be dealt with. As such, the beta-estimates for *image* were first estimated in a separate - otherwise equally specified - regression model on a reduced sample (*policy to person scale* value 1–6). In this focused sample, 50% of the respondents saw a private tweet with a picture and the other half saw the same tweet without a picture. This allows us the estimate the effect of *picture* without a potential bias caused by a particular (dis)like of private tweets. We feed the estimated 'unbiased' beta-coefficient back into the main regression with a fixed coefficient to make sure that the effect of *picture* is statistically controlled for. Finally, we apply a multi-level framework so that we can estimate country-level variable slopes.[12] This does **not** mean that we aim to make any generalizations beyond the two countries under study. Indeed, careful to not overgeneralize, such a multi-level approach is suitable even with two countries (Gelman and Hill, 2006, p.246). Alternative specifications with separate models per country are shown in appendix H and yield very similar results.

8.2. Observational pilot study

Before launching the survey experiment, we ran a small pilot study with observation data. Its main goal was to inform the design of the manipulations in the experiment. More specifically, we wanted to check if *elected representatives actually do post 'private' and 'policy' tweets*. Moreover, we wanted to get a first impression of the key variation we are interested in: *do people that follow politicians on Twitter appreciate some tweeting styles more than others?*

Only a few studies so far have studied to which extent politicians use privatized tweets: Amongst the first were Golbeck et al. (2010) who hand-coded tweets of US Congresspeople to find out that politicians use Twitter to promote information about themselves and to report about their daily activities. Kruikemeier (2014) distinguished between "politically personalize" and "interactive" communication on Twitter with hand-coding tweets of Dutch politicians. One category of her "political personalization" category included "candidates' personal life". Only about 15 per cent (after the election campaign) and 17 per cent (during the election campaign) of tweets were coded as being about their personal life (what we call "private"). Generally, the share of private tweets seems to be rather low in contrast to policy-oriented tweets. More recent approaches using large scale quantitative text analysis such

as Mertens et al. (2019) also find that overall professional Twitter communication dominates over personal tweets with large variation between gender and parties. We run the presented pilot to affirm that this general pattern replicates in the two countries under study.

For this pilot, we first drew a sample of (n = 1739) tweets a from a population of n = 1.316.458 tweets sent by Swiss and German MPs (June 2009–June 2019). We then manually coded this sub-sample of tweets as either *private*, *policy* or *other* (see appendix A for details on the sample and tweet classification).

Figs. 3 and 4 show the pilot study results. We can see in Fig. 3 that politicians indeed post both 'private' and 'policy' tweets. The private tweeting style, however, only constitutes about 5% of all tweets. We furthermore learn that Swiss and German MPS share a substantial amount of policy content, in particular in Switzerland. Interestingly, however, the majority of tweets in both countries falls in neither the private nor the policy category, but in a third 'rest' category (for example, tweets linking to or retweeting newspaper articles, to events organized by party members, colleagues or voters). Future research could analyze this category in more detail. Here, we concentrate on the two categories of private and policy tweets since we have distinct theoretical expectations about their use and effect.

Additionally, to get a first impression of how voters appreciate different online behaviors by politicians, we inspected the engagement (relative number of likes) with different tweeting-styles. Fig. 4 suggests that on average, tweets with a *privatized* style get the lowest level of engagement: on average only around 0.15 percent of followers (i.e. around 1 of every 650) clicks on the little heart (♥) next to a tweet about a politician's private life. For *policy* tweets this average value is around 0.24 percent (around 1 of every 240 followers). All in all, this pilot study thus suggests fertile ground for the envisioned survey experiment to continue: 'policy' and 'private' tweets occur in real life and there seems to be variation in how these two styles are appreciated by voters.

9. Main results: what do voters want: policy or private?

Our key approach to scrutinising whether voters prefer private tweets over policy tweets is to run a survey experiment. We first look at our results descriptively. Doing so, we see in Fig. 5 that the more extensive and specific the policy content of a politician's tweets, the higher they will be evaluated by voters. While purely private tweet
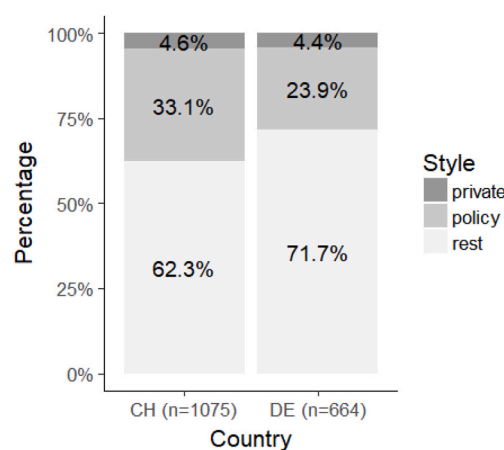
Fig. 3. Style by country.

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[13] Difference between engagement rates and its significance as calculated by simple binomial regression model predicting *number of likes (success)* for n = *number of followers* trials, with tweeting style as the predictor. Signif. Codes: <0.001 ***; 0.001 **; 0.01*; 0.05.

Fig. 4. Engagement and style.[13]
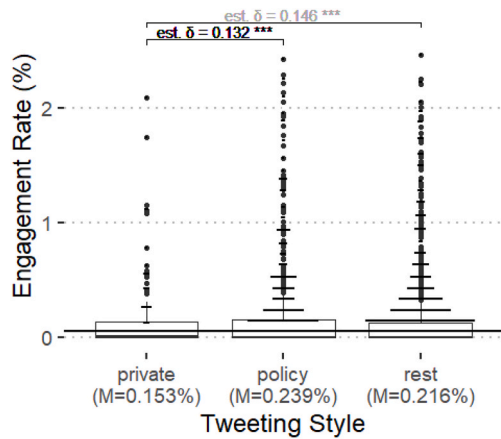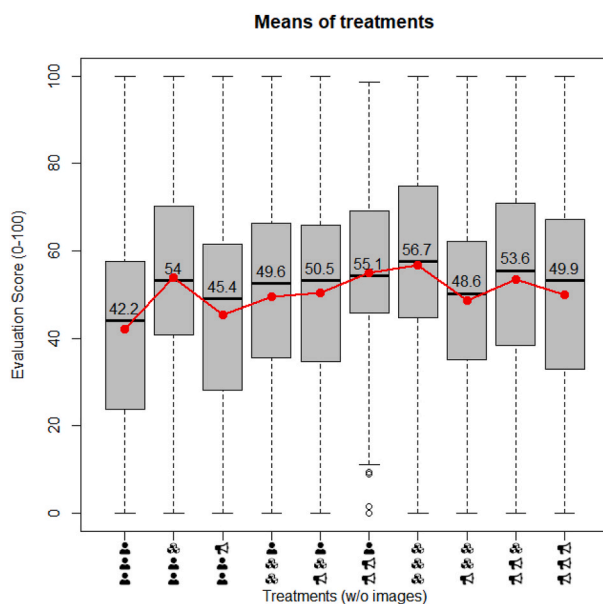

Fig. 5. Average Evaluation sorted by treatment with varying private/policy ratio.

series are evaluated with only 42.2 on our scale from 0 to 100 measuring the likelihood to vote, the combinations of policy position tweets, also in combination with distinct policy positions are distinctly higher rated at 56.7 points for example.

Turning our attention to the inferential results, the linear regression model in Table 1 shows the results of our regression analysis of the relation between the private vs. policy scale (key independent variable) and *perceived willingness to vote for the presented politician* (key dependent variable) by respondents.

In line with Hypothesis 1 the effect of the 'policy to private' scale in Model 4 in Table 1 shows that tweet-series with more policy than privatized content are evaluated higher by respondents. These regression results suggest that with every one step increase on our 10 point 'private-to-policy' scale the self reported perceived willingness (range from 0 to 100) to vote for the politician that posted these tweets goes up with roughly 1.335 points, resulting in an estimated 13.35 point increase in perceived willingness to vote over the entire range of the private-to-policy scale. This suggest that what style you use on Twitter as a

Table 1
Linear regression model predicting willingness to vote for a politician, for n = 4358 respondents.

Fixed effects	Treatment	Tweet char.	Match char.	Person char.
	(1)	(2)	(3)	(4)
(Intercept)	47.800**	52.674**	58.614**	57.994**
	(1.319)	(1.798)	(1.125)	(1.783)
Treatment				
Private (low) to policy (high) scale	0.621**	1.380**	1.339**	1.335**
	(0.141)	(0.181)	(0.173)	(0.172)
Tweet-series characteristics				
Left leaning tweet-series (ref: neutral)		−1.050	−0.117	−0.035
		(1.299)	(1.355)	(1.348)
Right leaning tweet-series (ref: neutral)		−8.922**	−7.926**	−7.681**
		(1.295)	(1.348)	(1.341)
All tweets of series same style		−4.917**	−5.295**	−5.142**
		(1.084)	(1.039)	(1.033)
Shown politician without party label		−5.607**	−10.799**	−12.006**
		(1.023)	(1.024)	(1.035)
Contains image*[1]		3.462 *	3.462*	3.462*
		(1.355)	(1.355)	(1.355)
Match characteristics				
Content left-right mismatch			−2.022•	−2.133*
			(0.953)	(0.948)
Gender mismatch			0.652	0.729
			(0.782)	(0.778)
Party mismatch: Germany			−22.179**	−21.897**
			(1.026)	(1.080)
Party mismatch: Switzerland			−10.927**	−11.016**
			(1.078)	(1.134)
Respondent characteristics				
Age				−0.028
				(0.028)
Gender (Female)				3.713**
				(0.796)
Education Level (Low)				2.671
				(1.378)
Education Level (High)				−1.789•
				(0.870)
Respondent left-right score*[2]				0.087**
				(0.017)
Random effects				
Respondent-level variance	742.2	721.5	307.0	0.000
	(0.586)	(0.625)	(1.010)	(1.010)
Country-level variance	3.134	4.261	0.294	0.000
	(2.397)	(2.200)	(3.073)	(0.624)
Log Likelihood	−20,587.2	−20,520.1	−20,339.6	−20,314.4

Notes.
- •p < 0.1; *p < 0.05; **p < 0.01; Fit by maximum likelihood (Laplace Approximation).
- *[1] Fixed 'unbiased' beta-estimate from version of model 4 ran on reduced sample (*private to policy* < 6).
- *[2] Larger values indicate more right.

politician matters for your electoral chances.

Fig. 6 reveals the relative size of the obtained 'private vs policy' effect. It compares the impact of the private to policy scale with the biggest predictor in the model: party mismatch. We are doing this as a benchmark to provide a relative image of how important tweeting style is in comparison to other well-established drivers of vote choice. We thus compare the effect of the tweeting style with the effect of being presented a politician that does not come from the respondent's preferred
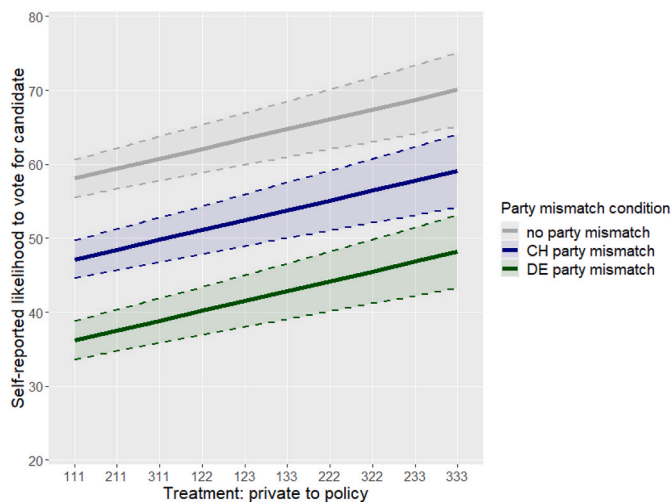
Fig. 6. Estimated effect of treatment when there is (not) a party mismatch in Germany and Switzerland. *A treatment consists of three tweets: 1-private, 2-generic policy, 3-policy with position. ** Note that x-values are our manipulation, with more or less equal sizes per condition. As such the estimated confidence intervals are not wider at the end as we often see with observational data.

party ('party mismatch'). We can see that in Switzerland the effect of a party mismatch is estimated to be around −11.016. This means that - as we can see also from the visualization of this interplay in Fig. 6 - the effect of tweeting style can overwrite a party mismatch in Switzerland. Interestingly, this effect is quite different in Germany, where the effect of a party mismatch is much stronger (about double). In Germany, as a result, the effect of tweeting style is not strong enough to overcome partisan boundaries.

Turning our attention to the control variables we see several effects in line with what would be expected. There is some suggestion in the data that the other 'match characteristic' of ideological mismatch (e.g. a policy tweet with a right-leaning policy position while we know from their earlier answers to our survey that they themselves are left-leaning) matters as well.

We also investigated several aspects of gender. We find that female respondents report a higher willingness (around 3.74 percentage points) to vote for the presented candidates, irrespective of the candidate's gender. We do **not** find support for the idea that *female politicians* are less likely to be voted for (see appendix). We also do not find that a match between the *gender of the respondent* and the gender of the presented politician leads to significant higher evaluations.

We also estimated the effect of respondents' education partially with the idea that higher educated respondents, in particular, would prefer policy tweets. Our analysis (see the appendix) does not suggest that to be the case. It seems that the preference of policy tweets over private style tweets applies to respondents at all levels of education equally.

We finally find that politicians *without a party label* also get lower scores. We also see that respondents prefer a *mixed-style* and that our right-leaning tweets suppressed the desire to vote for the presented politician. Finally, tweet series with an *image* invoke more positive voting responses.

10. Conclusion and discussion

This paper started from the idea that direct encounters between citizens and politicians are made possible with the expansion of social media, which could have the potential to improve representation in case tweets with policy content are valued by voters. The findings are quite reassuring from this point of view. First of all, we find that it is not a privatized style, but the policy-oriented tweet style that is appreciated

by Swiss and German voters. This confirms earlier studies that showed that privatization increases political cynicism (see Jebril et al. (2013)) while at the same time running counter to US findings showing privatized tweets to be more positively evaluated (see e.g. Meeks, 2017). The difference with the latter may be routed in context differences between the USA and Europe. Not only is social media more popular and relevant in the US, the presidential system also renders personalization and focalisation on single politicians and their life more common. Although the Swiss electoral system provides possibilities to rank order or move candidates on electoral lists, voters do not seem to focus more on the private lives of politicians as a result. However, the Swiss electoral system seems to motivate voters to rather evaluate politicians according to their policy statement irrespective of party identification. Moreover, the stronger role of parties in Germany, but also to some extent Switzerland, may be a reason for a stronger focus on policy content than persons. More research is needed to assess the generalizability of our findings to first-past-the-post systems for example.

We find that citizens seem to appreciate policy-oriented messages on Twitter while politicians at the same time use this style relatively infrequently - at least compared to our rest category. The effects are quite substantial. This is positive news for those who believe that social media has the potential to allow for closer policy-linkages between citizens and politicians. However, one must also admit that this democratic potential is only fulfilled if online encounters are quite frequent, i.e. if ordinary citizens follow politicians and actually read their messages. And here, there are reasons to be sceptical about the potential to reach out of politicians' message as it is well known that Twitter users are younger and wealthier than the average population (e.g. Blank, 2017). To truly assess the democratic, representational value of social media, this should not be forgotten.

Also, we should keep in mind that our study focuses on Twitter specifically. While current evidence in the literature is affirmative that this is a platform that is used to communicate directly between politicians and voters (e.g. Stier et al., 2018), we cannot be 100% sure that these findings generalize to other social media platforms (see also (Bode and Vraga, 2018)). At the very minimum, our findings apply to one of the most important social media platform.

Data availability

The data collected for this study are openly available on FORSbase (look for 'Policy or person'), reference 14103. The R-scripts used for the analysis can be viewed and downloaded at https://github.com/TomasZwinkels/DL_survey.

Appendix A. Supplementary information

Supplementary data to this article can be found online at https://doi.org/10.1016/j.electstud.2021.102401.

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