How Social Influences and Individual Differences Affect Online-Activism

Gloria Eva Marie-Luise Kempelmann

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Supervisor: Ph. D. Emma Bäck
Abstract

Traditional protest behaviours are motivated by social influences (e.g., Finkel & Opp, 1991), whereby individual differences moderate this effect (Bäck, Bäck, & Garcia-Albacete, 2013). With this experiment it is tested whether the same pathways apply to online activism. For this between-subject design, 75 young to middle-aged adults were tested on the traits of need to belong and rejection sensitivity. Following the exposure to either low ($n = 34$) or high ($n = 41$) social support, participants reacted upon petition appeals on a social network site. It was found that high social support enhanced the willingness to participate in online activism. However, rejection sensitivity in moderation of social support did not influence willingness to engage in online activism, whereas need to belong in moderation of social support affected willingness to engage in online activism. Implications of these findings are set in context, and future research possibilities are discussed.

*Keywords:* social incentives, rejection sensitivity, need to belong, online-activism, protest
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Many social interactions and political behaviours, such as political activism, take place online. As social influences and personality traits motivate conventional, that is, ‘offline’ protest, it is now investigated whether similar patterns apply to online activism.

Social and Political Behaviours on the Internet

People commonly use the Internet, and have made it an important medium to interact socially, as well as to engage politically. Social media, defined as media on which participants can interact. About half of the German Internet users visit social network sites (SNSs; Statistisches Bundesamt, 2013). SNSs are websites on which users can interactively form their social connections online. It was found that users spent much time on SNSs interacting with their offline social circles (Statistisches Bundesamt, 2013; Lampe, Ellison, & Steinfield, 2006), and likeminded people (Kaye, 2011; Bimber, 2008), whereby younger individuals are more engaged in this form of communication, but older individuals are becoming more active, too (Hampton, Goulet, Rainie, & Purcell, 2011). In this way, users cultivate and extend their social ties throughout the network (Zhang, Johnson, Seltzer, & Bichard, 2010). Furthermore, a majority of users receive political information from online sources such as online newspapers, magazines and news sites (Statistisches Bundesamt, 2013), and many users visit interactive sites on which they, for instance, express their political views, receive and share political information, engage in political discussions, vote and protest (Kaye, 2011; Statistisches Bundesamt, 2013). Nowadays, social media, and in particular SNSs, provide platforms for numerous protest behaviours. Users
frequently receive and share political and protest related content (Vitak et al., 2011; Varnali & Gorgulu, 2015), voice their ideas, and globally as well as locally affiliate with like-minded people (Marichal, 2013). Collectively, users appeal for social and political change by means of, inter alia, online petitions (Christensen, 2011), and online campaigns (Penney, 2014). On SNSs people distribute and discuss political information, for example on their network’s newsfeeds\(^1\).

Moreover, international and national participation rates are predicted to increase further (Rainie, Smith, Schlozman, Brady, & Verba, 2012; Statistisches Bundesamt, 2013). Hence, social, political and explicitly protest related uses of the Internet are already common and likely to further increase. With this study, it is asked whether online activism is motivated by the same mechanisms of social influences as conventional protests. First, the theoretical bases of conventional protest participation is clarified.

**Theoretical Framework of Protest Participation**

When it is asked what motivates people to protest, the first thing that comes into mind may be political and social change. Here, it may be argued that the individual has a rational choice whether to partake in protest. This behaviour can be defined in an equation, which had been first proposed for voter turnout (Olson, 1965), then Muller and Opp (1986) applied it to protest engagement. It reads

\[ \text{For clarification: a newsfeed is an individual page within each user’s account that shows chronologically what the user’s connections have published on their profile pages in form of status updates. A profile page is a personalised online page on which each user can publish thoughts, links, photos and videos, etc., which then are publicly, or semi-publicly, shared, mostly with the user’s connections and often with the broader public (Lampe et al., 2006). Those publications are called status updates. Status updates in turn are fed to the newsfeeds of the publisher’s connections.} \]
\[ U = P \times B - C \]

where \( U \) is the utility of protest, \( B \) from the benefit that derives from a successful protest, \( P \) is the probability that a single individual will evoke this success, and \( C \) is defined as the costs that the individuals experiences when she partakes in protest. An individual chooses to protest if the benefits of successful protest based on their individual engagement exceed her costs, or, expressed in mathematical terms:

\[ P \times B > C \]

Olson’s (1965) reasoned on voting behaviour, but this equation is applicable to much collective political activity in general (Bäck et al., 2011). It can be said that many political actions are conducted by a politically active group of people. If the action undertaken is successful, not only the politically active group members, but a greater amount of beneficiaries or even an entire society may profit from this outcome. Yet, for collective political action, an individuals’ single contribution to a political activity is very small, because the likelihood that this single individual’s contribution adds decisively towards a successful outcome is small (Olson, 1965). Given the small impact that one individual within one collective movement makes, the costs for the political engagement oftentimes overrides the possible benefits of the individual. It follows that free-riding on others’ efforts would be rational (Klandermans, & van Stekelenburg, 2013). When people politically engage nevertheless, their participation is paradoxical (Olson, 1965).

**Collective and Selective Incentives Models**

To solve this paradox, Bäck, Teorell, and Westholm (2011) proposed two solutions: First, the *collective incentives model*, which suggests that some citizens believe they have the efficacy
to influence political outcomes and therefore protest. The equation remains the same

\[ U = P \times B - C \]

but according to this model the outcome of the product \( P \times B \), that is higher perceived efficacy, will yield \( U > 0 \), where the utility is believed to be positive, and consequently the individual engages in protest. Second, the \textit{selective incentives model} which states that the individual, independently of the collective outcome, derives benefits from protest (Bäck et al., 2013). The previous equation (Olson, 1965) ought to be incomplete, and ought to be extended with \( D \),

\[ U = P \times B - C + D \]

where \( D \) is the reward that protesters gain by participation in protest \textit{itself} (Bäck et al., 2011). The reward derives from selective incentives, which are defined as social norm (e.g., Olson, 1965), strength of party identification (e.g., Finkel & Opp, 1991), expressive incentives, that is the satisfaction from expressing one’s opinion (Riker & Ordeshook, 1968), and entertainment value, defined as enjoying the company of others (Tullock, 1971). For instance, participation itself is motivated by social norm that either is imposed by the individual herself, or by others. Social norm, which also is called social normative influence at times (Deutsch & Gerard, 1955), can exert social pressure on the individual, therefore people comply to and conform with what is expected of them (Cialdini & Goldstein, 2004). For the sake of the following argumentation, I would like to point out that incentives may not only have a positive valence as suggested by the wording, \textit{incentive}, that is motivate people to act, but may also have negative valence, that is hinder people from, for instance, protesting. A explicit negative social norm against a protest behaviour may impede protest engagement (Finkel & Opp, 1991). It is reasoned that a lack for

\[ 2 \text{originally reward of voting independent of the election (Riker & Ordeshook, 1968) } \]
social norm on a topic, that is a neutral stand of the in-group, may dampen protest engagement, too, because it can signalise that the group does not value the topic. Moreover, I would like to remind the reader that essential all aforementioned selective incentives are social in nature, because they are defined by the interplay between the individual and an–in a broadest sense–an in-group, such as the individual is influenced by the norm defining in-groups in case of social norm, and the political party in case of party identification. The individual derives gratification from expressive incentives. According to the optimal distinctiveness theory (Brewer, 1991), the individual aims for the optimal equilibrium between being included in and distinguished from both, her in-group(s) and her out-group(s). The individual can optimally balance between inclusion and distinctiveness by the expression of, for instance, her opinion, hence expressive incentives are of psycho-social importance for the individual. Last, the individual experiences gratification by the company of others, or in other words, she experiences interpersonal and intra-group connectedness. It can thus be said that essentially, selective incentives are rooted in social needs of the individual in relation to others (Maslow, 1943).

**Extension of the selective incentives model.**

In the following, it will be argued that not only the established selective incentives of the selective incentive model may be valuable in the explanation of online protest activity, but also *other* social influences may affect protest engagement. Selective incentives, as stated by the model, are rewarding the individual with intra-group and inter-group gratification, whereas I propose that social influences in a broader sense not only fulfil these reward functions, but also facilitate the step towards protest engagement, that means they hold meaning in the *process* of
making the choice. In other words, in case of social influences, social fulfilment and connectedness is the bases on which protest evolves, whereas social incentives reward social fulfilment if the protest has been performed. Inside the given equation, those social influences are hence not defined in rewards $D$, but are framed as part of the term $C$, namely as influences that may lower or raise the costs $C$ of protest engagement, or may contribute to the term $P$, the probability that a single individual will evoke success of the protest. I argue that $C$ as well as $P$ are not static, in case of $C$, for example informational social influence this is “influence to accept information from another as evidence about reality” (Deutsch & Gerard, 1955, p. 629) facilitates information flow and hereby lowers the cost of participation. The latter term, $P$ may fluctuate depending on how strong the basis of the protest already is, up to the point where an individual’s contribution does not at all matter anymore to the protest, because the success is already secured by participant numbers and their engagement. $P$ for instance, is influenced by instrumental social support, which is defined as other group members that also are willing to take action or are taking action (van Zomeren et al., 2004), by doing so, the probability that the individual will successfully contribute to the protest rise, because it raises efficacy of the movement. In addition, protesters personally profit from social influences, because these influences, in one way or the other, strengthen the connections between the individual and the group. Thus, commonly, selective incentives as well as other social influences are social in nature, and are rooted in interplay of the self, the in-group and at times the out-group.

The individual behaves in ways that enables her to gain connectedness to and acceptance of others, as well as to avoid loss as she prevents herself from being rejected. According to the belongingness hypothesis, humans need ‘’to form and maintain […] interpersonal
relationships” (Baumeister & Leary, 1995, p. 499). Furthermore, people are sensitive to rejection cues in order to not be rejected (Williams, 2007). Lastly, for each individual these social needs are differently strong (e.g., Baumeister & Leary, 1995; Downey & Feldman, 1996). These theoretical bases in mind, it is focussed on empirical findings concerning social incentives and other social influences, which in the following are summarised to social influences, in conventional protest.

**Prevalence of Social Influences on Protest**

In the context of protest engagement, social influences, such as instrumental social support, that is other’s willingness to engage in protest actions (van Zomeren, Spears, Fischer, & Leach, 2004), and social network incentives, these are the expectations of others, group encouragement and meeting people accounted for form and extent of legal and illegal protest behaviours (Finkel, Muller, & Opp, 1989; Finkel & Opp, 1991). Compliance with social norms motivated people to protest, and to contact officials (Bäck, et al. 2011). Conclusively, social influences motivate humans to engage in various form of conventional protest. Next it will be argued, why online protest may be socially influenced, too.

**Social Influences in Online Activism**

The circles on SNSs are perceived as person’s in-groups, as such social influences are prevalent (Lampe et al. 2006). Indeed, current findings suggests that social influences spur online activism: networks on which political engagement was displayed were predictive of users’ online and conventional political engagement (Vitak et al., 2011). In addition, self-chosen circles, and
especially close connections, have encouraged users to vote (Bond et al., 2012), and to protest (Gibson & McAllister, 2013). Hence, social influences that promote protest are found on SNSs, but seemingly no research investigated individual differences in susceptibility, unlike in conventional protest behaviour.

**Individual Differences in Suggestibility to Social Influences**

Individuals differ in their need to belong (Leary et al., 2013) and rejection sensitivity (Downey & Feldman, 1996). A study on interpersonal differences of rejection sensitivity, as well as on the influence of social support, explored the willingness to protest against the introduction of tuition fees in Sweden. The results suggest that rejection sensitive participants were more willing to protest collectively through political involvement and organisation meetings if social support was high, but not if social support was low (Bäck et al., 2013).

So far it has been established that various human behaviours, including protest activities, are influenced by social incentives to individually varying degrees. As the offline world has been extending into the online sphere, protest consequently has become common in the online space, it ought to be asked whether—and if so, to what extent—the same social influences will similarly motivate people to engage in online activism.

**Hypotheses**

This study explores whether social influences, in this case, the influence of social support, enhance the willingness to engage in online protest behaviours, and whether this effect is moderated by individual differences in rejection sensitivity and need to belong.
First, aiming to replicate previously findings on social influences in protest activity, it is expected that the amount of the in-group's engagement influences the participant’s the overall willingness to participate in online protest behaviours. The first hypothesis reads accordingly: social support positively effects the willingness to online activism. More specifically, if the in-group supports the cause, the individual indicates willingness to engage, too and vice versa, if the in-group is disengaged, the individual is less willing to engage.

Previous research on conventional protest behaviour suggests that individual differences in rejection sensitivity moderate the impact of social support on political activism (Bäck et al., 2013). In an attempt to expand previous findings to online-activism, it is assumed that rejection sensitive people engage in online protest out of the fear of rejection. Hence, the second hypothesis states that if an individual's in-group promotes online protest, rejection sensitive people are more likely to take part in the protest. Conversely, if the in-group does not promote protest, rejection sensitive individuals are also less willing to engage in online activism.

Rejection sensitivity and need to belong represent two, conceptually different constructs (Leary et al., 2013) but both have been found to predict suggestibility to social influences (e.g., Bäck et al., 2013; Nolan, Schultz, Cialdini, Goldstein, & Griskevicius, 2008). For example, a great need for belong was associated with ample cooperation in social dilemmas (De Cremer & Leonardelli, 2003). However, individual differences in the need to belong have not been, to the knowledge of the author, explicitly tested on political activities. Given evidence from the social dilemma study, it is induced that the need to belong can moderate the impact of social influences on online protest. It follows the third hypothesis, which states that if many in-group members promote protest: persons, who score highly on the need to belong, are more willing to engage in
online protest behaviour; on the other hand, if the in-group does not promote online activism, individuals high in the need to belong are less inclined to participate, neither.

Method

Participants

The sample consisted of 75 German speaking participants (42 female). They were between 19 and 54 years old ($M_{\text{Age}} = 28.67, SD = 8.48$), and came from various educational levels and occupational backgrounds. Based on convenience sampling, participants were recruited via Facebook on profile pages and in groups, where they opted-in to answer this online survey. In exchange for the respondents' participation, they could choose to partake in a raffle for cinema tickets worth 20 Euros.

Materials

It was chosen to use petition appeals as experimental stimuli, because this form or similar forms of online activism are well known and employed by users, whereby in Germany roughly every fourth SNS user engaged in petition signing or comparable behaviours (Statistisches Bundesamt, 2013), whereas in the USA, participation was even higher, that is, ever third SNS-user

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3 The sample size follows a conservative estimate of $N \geq 50 + 8m (m = \text{IVs})$ (Tabachnick & Fidell, 2013). Five independent variables (three main-effects and two 2-way interactions) are used, which accumulates an aspired sample size of 90 participants. This is the actual, analysed sample. The total sample size incl. dropouts and outliers are presented in Result section.
engaged in petition signing or comparable actions (Rainie et al., 2012). Petition appeals not only inform readers about political and deficiencies, but also animate readers to react to them in form of liking, sharing or signing the petitions. As part of this survey, a fictitious Facebook newsfeed for the unisex identity ‘Kim Oosterhagen' was created using genuine Facebook publications, which were modified with the image editing software Adobe Photoshop™ and the Fake Name Generator™ (see Appendix A, Figure A1). This newsfeed featured four status updates of connections, these are, ‘friends‘. Two status updates contained appeals to petitions, these were target stimuli, whereas the other two status updates contained two neutral status updates, which were fillers. Fillers were chosen to enhance face validity. Thematically, one target stimulus was concerned with the suggestion of an influential CEO to privatise water, whereas the other target stimulus dealt with the Transatlantic Trade and Investment Partnership and its consequences. The fillers thematised flowers and holidays (for translations of Appendix A into English, see Table A1). All four chosen status updates had previously been pilot-tested by a convenience sample ($N = 10; M_{Age} = 25.9, SD = 1.73$). Herein, it was assessed in how far the petition appeals capture people’s interest, and to what extent people would act on the appeals by sharing and signing the petitions. The two out of eight most reaction provoking target stimuli were chosen. Neutral stimuli had been tested for their political neutrality, and the two out of eight most neutral fillers were chosen. One target and one filler were modified to look like they were posted by females, the other target and filler seemingly were posted by males. That way gender was balanced out throughout stimuli. All status updates were integrated into a general layout of the newsfeed, that is, of what an exemplary Facebook user may see on her personal newsfeed page. Then, this newsfeed was refined into two versions to create a manipulation, that is, one low social support condi-
ation, and one high social support condition. In the low social support version, each of the two target stimuli was seemingly shared by only one other person, respectively. In the high social support version, it appeared that 20 people had shared each target stimuli. Participants were exposed to either version of the newsfeed, and rated whether they would sign the petitions and share them on their profiles. Signing and sharing were both measured on continuous scales (0 = no and 100 = yes). These answers were summarised to the outcome variable online activism, which exhibited good internal reliability (Cronbach’s $\alpha = .72$) for four items.

Rejection sensitivity was measured with a German translation of the shortened Rejection Sensitivity Questionnaire (A-RSQ; Downey & Feldman, 1996). This instrument comprises nine scenarios, which each are followed by two items on 6-point scales, for instance: “You ask your parents or another family member for a loan to help you through a difficult financial time. A. How concerned or anxious would you be over whether or not your family would want to help you?” ($1 = very unconcerned$ and $6 = very concerned$) and “B. I would expect that they would agree to help as much as they can” ($1 = very unlikely$ and $6 = very likely$, reverse coded). The 18 answers were recorded according to description, then a reliability analysis showed good reliability of the RSQ-A (Cronbach’s $\alpha = .83$). The need to belong was measured with a German translation of the Need to Belong Scale (NTBS; Leary et al., 2013). It consists of ten statements rated on 5-point scales, for instance “I need to feel that there are people I can turn to in times of need” ($1 = not at all$ and $5 = extremely$). This scale, after it had been recoded according to description, was found to be of good internal reliability (Cronbach’s $\alpha = .78$). General political engagement was assessed with a modified version of the inventory for political voice (Keeter, Zukin, Andolina, & Jenkins, 2002). It consisted of 11 items, and exhibited good internal reliability (Cron-
Design

This experiment followed a between-subject design. A standard multiple linear regression was employed. The independent variables were the responses to the RSQ-A (continuous), and the responses to the NTBS (continuous). Participants were randomly assigned to either of the social support condition (low, high; categorical). This manipulation functioned as a low order term, as well as a moderator variable for both trait measures. The higher order terms of Rejection Sensitivity x Social Support, and Need to Belong x Social Support were also assessed. The dependent variable was the willingness to engage in online activism (continuous).

Procedure

Participation was voluntary, and participants could abort the survey at any given moment. They were informed that no harm was expected to occur to them by their participation, and that their responses were recorded confidentially. Also their were ensured that their data was analysed and presented anonymously. Participation was expected to be emotionally and physically harmless and ethically sound. Participants first filled out the RSQ-A and the NTBS. In the following, participants saw one of the two Facebook newsfeeds. They were instructed to assume that this newsfeed were their own, and that the presented posts including subsequent reactions to the wall posts were reactions of their Facebook friends. Participants subsequently rated on a 101-point scale whether they would share and sign the petitions (0 = very unlikely, and 100 = very likely). They filled out their demographic data, and the questionnaire about their political voice. Lastly,
they were thanked for their participation.

Results

The analyses focussed on the influences of social support, rejection sensitivity, and need to belong on online activism. The manipulation social support was taken into account as a predictor per se, as well as a moderator of rejection sensitivity and need to belong. Throughout the analyses, the statistically significant p-value equals the common cut-off value of $p = .05$, and tendencies are flagged to a cut-off p-values of up to $p = .1$.

Preliminary Data Analyses

The data was collected during a one-and-a-half month period. One hundred participants started the survey. Data of participants who aborted the survey in progress ($n = 24$) were dismissed, because if participants dropped out in this study, they did so in the very beginning of it. For those drop outs that stated their gender and age ($n = 20$), a data comparison in form of a t-test between sample participants and dropouts who stated their gender ($N = 96: n_1 = 76, n_2 = 20$, respectively) revealed a bias towards male participant dropout $t(34.20) = -2.26, p = .024, \bar{\delta} = -0.47, 95\% \text{ CI } [-0.51, -0.04]$. No duplicate cases were detected in the remaining data set, and no data was sporadically missing of those who had followed the survey to the end. Variables were summarised according to descriptions. Further, one univariate outlier was deleted (DV-score: $z = 4.78, p \leq .001$), because seemingly, this participant answered following a visual pattern. No multivariate outlier was detected using Mahalanobis' distance. The final data set included 75 cas-
The two groups are based on randomised group membership in social support, that is a low social support condition \((n = 34;\) dummy coded: 0), and a high social support condition \((n = 41)\). Both groups generally did not differ in distribution of demographics (see Appendix B, Table B1). Assumptions for univariate linear models held.

In order to check the quality of the dependent variable, that is whether participants considered online activity to be protest behaviour, online activity was correlated against general political participation. It was found that general political participation was moderately predictive of online activism \((r = .42, p < .001)\), which means that participants, who in general protest more, are more willing to engage in online activity, too.

**Main-Analysis**

The continuous independent variables were centred to avoid statistically induced multicollinearity, then a standard multiple regression was run (see Appendix C, Table C1; for variance and covariance matrices see Table C2, and C3 respectively). The lower-order terms, namely rejection sensitivity (low values = rejection insensitive), and need to belong (low values = low need to belong), the moderator variable social support (dummy coded, where 0 = low social support), and both 2-way interaction terms of Social Support x Rejection Sensitivity, and Social Support x Need to Belong conjointly entered the model in order to explain online activism (Appendix C, Table C1). Overall, the full model explained 5 percent of the total variance \((R^2_{adj} = 0.50, F(5, 69) = 1.78, p = .129)\).
In an attempt to replicate previous findings, the first hypothesis states that high social support leads to more online activism, in comparison to low social support. The contribution of social support to the model is statistically significant ($\beta = .24, p = .045$), and it uniquely contributes 5.38 percent ($sr = .23, p = .045$) to the variance in the model. Thus, social support had a positive influence on online activity.

The second hypothesis is concerned with the extension of previous findings, that is, that rejection sensitivity interacts positively if social support is high, and negatively if social support is low. In this model the interaction-term Rejection Sensitivity x Social Support is non-significant ($\beta = -.04, p = .812$). This means that rejection sensitivity does not moderate social support in online activism.

The third hypothesis introduces the need to belong to the studies of protest, and postulates that individuals with a high need to belong engage more in online activism, but only if social support is high; if social support is low, the reverse pattern applies. The outcome of the standard multiple regression revealed a tendency ($\beta = -.28, p = .078$). To gain insight into the direction of the tendency, a mean-split that divided need to belong in two groups (low/high need to belong) was performed, and a post hoc simple effect analysis\(^4\) (ANOVA) was run. The simple effects are visualised in the following graph (Graph 1). It was found that within the high social support condition, individuals with a high need to belong engaged less in protest activity than individuals with a low need to belong ($p = .013$; partial eta squared = 0.83). The hypothesised reverse effect, that is, that low social support in combination with a high need to belong elects less willingness to engage in online activism could not be supported by the data. Within the low social support

\(^4\) In this ANOVA computation, only the two lower order terms (social support, need to belong, and the 2-way interaction) could be kept due to computational restraints.
group, participants with low and high need to belong did not significantly differ in intention to online activism ($p = .910$, partial eta squared $\leq .001$).

Graph 1

*Interaction of Low and High Social Support Group and Low and High Need to Belong Group on Online Activism*

**Discussion**

This experiment investigated social influences in moderation of personality traits in online activism. In the following, the results are interpreted and contextualised. The outcome partially supports the hypotheses.

**Social Influences Enhance Online Activism**

The first hypothesis stated that if social support for online protest is high, individuals are
more willing to engage in online activism than if social support is low. This hypothesis is corroborated, as more online activism was observed given high social support than given little social support. Hereby, the findings for offline protest (Bäck et al., 2011) could be replicated for online engagement. Also, this finding can be integrated into the extended selective incentive model that postulates that selective incentives, and social influences can motivate protest.

The original selective incentives model suggests that the variable social support expresses social norm towards the potential protester or entertainment value. The finding may be interpreted as pressure of the in-group that fostered the individual’s compliance. In terminology of the equation previously introduced, selective incentives are integrated into a rational choice model, namely

\[ U = P \times B - C + D \]

where \( D \) is the reward that protesters gain by participation in protest itself. The compliance to social norm secures the individual as part of the group (Olsen, 1965). Social norm may have influenced the decision to online activism: Nolan et al. (2008) found that social norm\(^5\) had the highest success rate in an experiment on persuasive communication concerning energy conservation. Moreover, the effect may be based on entertainment value (Tullock, 1971), that is, in this case, users enjoy digital affiliation with others. Protesters communicate to their circles that they have taken part in a movement, because this information is publicised to the users network if the user signs the petition or shares it.

Concerning the extended selective incentive model, the observed effect may express informational normative influence, which implies that the appeals have become more trustworthy as

\(^5\) or as they coined it “social normative influence”
more people have signalled support for those causes already. In terms of the rational-choice equation this pathway lowers $C$, the cost term of protest. Additionally, high social support may reflect a promising amount of supporters, which heightens $P$ the likelihood that the contribution of one individual makes the protest successful.

It may be that either of those social influences is enhanced in comparison to conventional protest by so called 'masspersonal' communication. This type of communication is technically supported by several SNSs, and enables each sender to simultaneously interact with individual users, a closed network, as well as the broader public (O’Sullivan, 2005). Through this way of communication, social capital, which describes resources provided by a network of meaningful others, including weak connections, as in acquaintanceship, and strong ties as in friend- and relationships (Bourdieu, 1985) is fostered (Hampton et al., 2011). In accordance to this, Ellison et al. (2011) found that social capital on Facebook fostered instrumental as well as social support online, but also in the offline world. In the current experiment, the amount of social support was manipulated, and it was shown that online social support activated people to partake in online protest. It is hereby suggested that enhanced connectedness and display of social support may lead to more online activism, which is in line with the findings of Rainie et al. (2012): in their extensive research they found a strong, positive, yet correlational relationship between Facebook use and political activity. Moreover, online protest and mobilisation especially spread through strong ties as supported by a network analysis on social contagion of a protest movement. In the beginning of the movement, the leaders of the recruitment are in atypical topological positions, that means that they are situated in the periphery of a network, which can be interpreted as weak ties. The movement gained moment through so called spreaders, those who were centrally located.
in the network. Spreaders can be interpreted as closer ties to the target network, given the assumption that a higher amount of connections between ‘nodes’, or users, of a network equals a closer connectedness between two nodes (Gonzalez-Bailon, Borge-Holthoefer, Rivero, & Moreno, 2011). Research supported that weak social ties are politically influential, but close friends rather than acquaintances were the most influential in offline voter turnout (Bond et al., 2012).

Furthermore, the effect of social support on willingness to partake in online activism may be supported by informational social influence, where information of social connections is treated as evidence about reality, because information processing is guided by cognitive heuristics in credibility evaluation (Metzger & Flanagin, 2013). This implies that more online activism may not only be triggered by normative social influence, as proposed by the social incentives model (Bäck et al., 2013), but also by informational social influence. For example, politically inactive users received food of thought by their circles (Kaye, 2011), which has been found not only to increase the amount of followers of a movement, but also to diversify the social spectrum of activists in offline social movements (Schwarz, 2011).

**Interpersonal Differences in Susceptibility to Social Support**

Next, it is presumed that individuals are, to an interpersonally varying degree, susceptible to social influences towards online activism. Therefore, the second and third hypotheses focussed on the interplay between rejection sensitivity and social support, and the need to belong and social support, respectively, as well as the effects of these interplays in online activism.

In extension to previous findings (Bäck et al., 2013), it was postulated that rejection sensi-
tive individuals engage more in protest if social support was high, whereas the opposite pattern is expected if their network does not support protest activity. This hypothesis could not be supported by the findings, namely, in this experiment, rejection sensitivity, moderated by the extent of social support, did not exhibit an influence on protest activity. These findings can mean that the influence of rejection sensitivity observed in offline protest (Bäck et al., 2013) may not carry over into the online sphere, or that the petition appeals might not have been perceived as appeals to a social norm, but as informational social influence, which, to the knowledge of the author, has not been found to stand in moderating relationship with rejection sensitivity.

Another possibility for the non-support of this hypothesis can be low power, based on the relatively subtle social support manipulation as well as low participation rates, as later discussed in the section on shortcomings (see Shortcomings). Bäck (2014) found that the trait of rejection sensitivity determined protest engagement, especially under the circumstance that potential protesters had previously been rejected. She found that highly rejection sensitive, angered individuals protested most against the introduction of tuition fees in Sweden, in comparison to rejected but rejection insensitive individuals, and in comparison to non-rejected, rejection sensitive individuals. If the trait of rejection sensitivity in relation to online activism by means of social norm or group belongingness should be explored again, it is suggested to trigger rejection sensitivity in rejection sensitive individuals.

Lastly, the need to belong is introduced to the study of online protest behaviour. The third hypothesis postulates that individuals with a high need to belong are influenced by social support, namely, they are more susceptible to engage in protest activity under high social support and comply to it in the form of protest, but they are less inclined to engage if little social support is
signalised. Interestingly, the results exhibit a pattern contrary to this hypothesis, namely, the results suggest that in tendency high social support has a positive effect on protest engagement on people with \textit{low} need to belong, rather than a \textit{high} need to belong. In fact, low need to belong led to a significantly higher willingness to SNS protest. Possibly, individuals high in the need to belong did not perceive the high social support condition as solid social support, and were not encouraged to protest, whereas the effect for individuals with low need to belong under high social support might express a instrumental motivation, namely high social support for a petitions can indicate that these petitions are gaining momentum, so supporting these petitions may underlie utilitarian considerations of the extended collective incentives model, that is that $P$, the change into a successful outcome that one individual can make, rises.

\textbf{Limitations}

The experiment yielded a very small main-effect the influence of social support in comparison to previous effects found on conventional activism, and the concept of social support may cover several social influences at ones. Arguably, the small effect sizes might be grounded in shortcoming within this experiment. First, a broad population was addressed, as potentially every German speaking Facebook user could access the study and partake. I think this openness strengthened the generalisability of the results, but at the same time, it did compromise a lower effect size based on this more diverse sample: the pilot sample had been more homogeneous in age, in terms of a homogeneously high educational level, and in political orientation compared to the sample of the main experiment. While the pilot sample indicated high engagement in proposed online petitions, the general sample was relatively disengaged. Generally, younger individ-
uals are more involved in social media and SNSs. Likewise, they participate more in online activism (Rainie et al., 2012; Statistisches Bundesamt, 2013). Even though a shift towards broader and more diverse base of SNSs users has been emerging, it may be argued, that online activism is still less attractive for older than younger individuals. Moreover, the survey topic was not disguised, but directly stated its purpose—the study of online activism. It may be hereby a bias was created towards politically and civically active participants, who may be less driven by social influences than the average protestor. There should have been a way to access the actual attitudes towards the two petition appeals, these are a petition against the TTIP and one petition against the request at the World Water Forum to privatise water without disguising the amount of social support. Unfortunately, these measures have not been taken in during the data collection. Also, the manipulation of social support may have carried an ambiguous concept. It may have represented social norm more clearly if instead of 20 shares, it had been shared by even a greater number of network connections.

Future Research

For future studies on online engagement, it should also be investigated how different kinds of online protest behaviours may be motivated by various social influences. In this experiment, the willingness to participate, instead of actual engagement was accessed because of time constraints. It was reasoned that, in accordance with theory of planned behaviour (Ajzen, 1985), intentions to politically engage predict actual protest behaviour, and intentions are better indicators for behaviour than attitudes (LaPiere, 1934). Future research however, could follow the distribution of the actual protest behaviours, and analyse motivations behind online protest engagement,
maybe in form of a software in combination with big data analysis. Doing so would decisively raise validity. In congruence with the self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), social identity could be made silent, to elect even more compliant behaviours.

Moreover, it will be interesting to further explore social motivations on online political action, as has been noted that “motivations for political engagement on social media may vary by activity” (Macafee, 2013, p. 2766), for instance, posting news stories was motivated predominantly by informational factors, and was posted to provoke discussion, whereas sharing links was predominantly associated with social and presentational needs of the social media users (Macafee, 2013).

Conclusion

Conclusively, the Internet facilitates the distribution of political information, and SNSs in particular offer diverse standpoints and social influence. Not only are some online political campaigns claimed successful (Penney, 2014), but online political engagement and online activism motivate offline civil engagement. As more is known about the mechanisms of online activism, more political engagement can be promoted. The fortitude of social influences online protest in comparison to various conventional protest is yet to be determined. It is proposed that the fortitude of one written message on an SNS may be of less intense than a face-to-face encounter with a politically active entity, but the ubiquity of these messages may make the change towards a more politically and civically engaged society.
References


Gustafsson, N. (2013). *Leetocracy - Political participation, social network sites and inequality*


Macafee, T. (2013). Some of these things are not like the others: Examining motivations and political predispositions among political Facebook activity. *Computers in Human Behavior, 29*, 2766–2775. doi:10.1016/j.chb.2013.07.019


Appendix A

Figure A1
Table A1

<table>
<thead>
<tr>
<th>Post by person:</th>
<th>gender (female / male)</th>
<th>filler / target</th>
<th>English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria Neudorfer</td>
<td>female</td>
<td>filler</td>
<td>My new Livingstone daisies</td>
</tr>
<tr>
<td>Leon Klein</td>
<td>male</td>
<td>target</td>
<td>Impede TTIP! <a href="http://www.umweltinstitut.org">www.umweltinstitut.org</a> The EU and USA are have been negotiating the TTIP (Transatlantic Trade and Investment Partnership). The consequences of this agreement would be negative in many ways</td>
</tr>
<tr>
<td>Matthias Seiler</td>
<td>male</td>
<td>Filler</td>
<td>Best weather for a getaway @ Hochzeiger - Pitztal</td>
</tr>
<tr>
<td>Denise Grunwald</td>
<td>female</td>
<td>Target</td>
<td>“The opinion I think is extreme, is that as a human you should have a right to water“ act.storyofstuff.org Nestlé backed up that statement with this ruthless move at the World Water Forum.</td>
</tr>
</tbody>
</table>
Table B1

Descriptive Statistics and Comparison of Demographics by Manipulation Condition Social Support

<table>
<thead>
<tr>
<th>Variable</th>
<th>Condition</th>
<th>1 (n = 34)</th>
<th>2 (n = 41)</th>
<th>F (1, 73)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support</td>
<td>low</td>
<td>29.35 (8.92)</td>
<td>28.10 (8.17)</td>
<td>1.51</td>
<td>.531</td>
</tr>
<tr>
<td></td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Age (SD)</td>
<td></td>
<td>29.35 (8.92)</td>
<td>28.10 (8.17)</td>
<td>1.51</td>
<td>.531</td>
</tr>
<tr>
<td>Gender (Female / Male)</td>
<td></td>
<td>20 / 14</td>
<td>22 / 19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mean RSQ-A (SD)</td>
<td></td>
<td>8.10 (3.56)</td>
<td>9.43 (3.74)</td>
<td>.00</td>
<td>.123</td>
</tr>
<tr>
<td>Mean NB (SD)</td>
<td></td>
<td>3.07 (.70)</td>
<td>3.24 (.58)</td>
<td>.68</td>
<td>.269</td>
</tr>
<tr>
<td>Mean OA (SD)</td>
<td></td>
<td>30.73 (23.02)</td>
<td>40.84 (26.07)</td>
<td>.57</td>
<td>.082</td>
</tr>
<tr>
<td>Mean ACT (SD)</td>
<td></td>
<td>1.26 (.21)</td>
<td>1.27 (.27)</td>
<td>1.84</td>
<td>.792</td>
</tr>
</tbody>
</table>

*Note.* RSQ-A = rejection sensitivity; NB = need to belong; OA = online activism; ACT = general political engagement
Appendix C

Table C1

*Standard Multiple Regression Explains the Variance of Online Activism*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model B</th>
<th>95% Confidence Interval</th>
<th></th>
<th>Correlations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Zero-order</td>
<td>Partial</td>
<td>Semi-partial</td>
</tr>
<tr>
<td>Constant</td>
<td>30.35</td>
<td>.001</td>
<td>[21.78, 38.91]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td>11.84</td>
<td>.045**</td>
<td>[0.29, 23.39]</td>
<td>.20</td>
<td>.24</td>
<td>.23</td>
</tr>
<tr>
<td>Rejection Sensitivity</td>
<td>-.87</td>
<td>.488</td>
<td>[-3.37, 1.63]</td>
<td>-.09</td>
<td>-.08</td>
<td>-.08</td>
</tr>
<tr>
<td>Need to Belong</td>
<td>2.67</td>
<td>.675</td>
<td>[-9.99, 15.34]</td>
<td>-.13</td>
<td>.05</td>
<td>.05</td>
</tr>
<tr>
<td>Social Support x Rejection Sensitivity</td>
<td>.39</td>
<td>.812</td>
<td>[-2.89, 3.67]</td>
<td>-.09</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>Social Support x Need to Belong</td>
<td>-16.62</td>
<td>.078*</td>
<td>[-35.17, 1.92]</td>
<td>-.23</td>
<td>-.21</td>
<td>-.20</td>
</tr>
</tbody>
</table>

*Note: n = 75, ** stat. sign p ≤ 0.05, * tendency p ≤ 0.1,*
Table C2

**Correlations & Covariances of Standard Multiple Linear Regression with Values for SS, RS, NB, 2-way Interaction RS x SS, and NB x SS**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>SS</th>
<th>RS</th>
<th>NB</th>
<th>2-way Interaction RS x SS</th>
<th>2-way Interaction NB x SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS</td>
<td>-.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NB</td>
<td>-.05</td>
<td>-.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-way Interaction RS x SS</td>
<td>.04</td>
<td>-.76</td>
<td>.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-way Interaction NB x SS</td>
<td>-.01</td>
<td>.21</td>
<td>-.68</td>
<td>-.27</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Covariances</th>
<th>SS</th>
<th>RS</th>
<th>NB</th>
<th>2-way Interaction RS x SS</th>
<th>2-way Interaction NB x SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS</td>
<td>33.52</td>
<td>-.92</td>
<td>-1.92</td>
<td>.37</td>
<td>-.50</td>
</tr>
<tr>
<td>RS</td>
<td>-.92</td>
<td>1.57</td>
<td>-2.40</td>
<td>1.57</td>
<td>2.40</td>
</tr>
<tr>
<td>NB</td>
<td>-1.92</td>
<td>-2.40</td>
<td>40.32</td>
<td>2.40</td>
<td>-40.32</td>
</tr>
<tr>
<td>2-way Interaction RS x SS</td>
<td>.37</td>
<td>-1.57</td>
<td>2.40</td>
<td>2.70</td>
<td>-4.14</td>
</tr>
<tr>
<td>2-way Interaction NB x SS</td>
<td>-.50</td>
<td>2.40</td>
<td>-40.32</td>
<td>-4.14</td>
<td>86.40</td>
</tr>
</tbody>
</table>

*Note.* SS = Social Support, RS = rejection sensitivity, NB = need to belong