

The Effect of Online Socialization on Political Reasoning

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Abstract

This study examines if and to what extent online socialization moderates the negative effects that polarization has on political reasoning. To evaluate this question, I use a 3x4 survey experimental design randomly assigning participants first, to a polarized, slightly polarized, or non-polarized context and second, to receive two of four policy arguments (pro strong, pro weak, con strong, con weak). Additionally, I use self-reported online use to create an online and non-online cohort. However, contrary to my theory that online socialization heightens lower quality reasoning caused by political polarization, I find little difference between the online and non-online cohorts in the extent to which participants rely on party cues and on weak policy arguments. I end by discussing the implications of these findings.

Introduction

It is becoming increasingly difficult to deny that political polarization has increased significantly recently. These anecdotal observations have been bolstered by research finding that political party elites and the population at large have indeed drifted further apart on a wide variety of issues (Druckman & Peterson 2013). In response to concerns over this trend, scholars have explored the implications of polarization (Druckman 2013, Thornton 2012). One particularly interesting study done by Druckman and colleagues (2013) finds that polarization appears to cause people to engage in a fundamentally inferior process of opinion formation. Specifically, they find that in a non-polarized environment, people generally look to strong arguments to form opinions, regardless of political affiliation, but when introduced to a polarized environment, the order of priority shifts. Not only were opinions formed by placing more trust in parties instead of strong arguments, people also displayed more confidence in their opinions based on weak, unsubstantiated arguments. It does not take much thought to imagine how such changes can strike at the heart of any democracy.

While Druckman (2013) focuses on polarization's effect on reasoning, other research has explored the effects of online socialization on reasoning and information processing (Zhong 2011). Socialization itself has also undergone a paradigmatic shift in recent years. The advent of online technologies has revolutionized how people spend their time. In fact, studies find that Americans now spend upwards of 5 hours per day online or using social media. It is common for the majority of a person's social interactions to take place online and it is not unreasonable to think that this has an effect on reasoning. Some findings suggest that users socialized online are more likely to employ parallel as opposed to linear information processing (Zhong 2011). Parallel reasoning involves fewer considerations and therefore results in less-carefully formed opinions, this type of reasoning should obviously be of concern to social scientists.

While the effects of such technological immersion on cognitive reasoning have piqued the interest of psychologists, political science scholars have yet to examine their effect on political reasoning. As Internet use becomes more pervasive, the effect that it has on reasoning is

extremely important to not only those who study reasoning and socialization, but to political scientists as well. The way the public constructs decisions is critical to political strategizing, campaigning, policymaking, and predicting voter behavior. Such is the charge of this project where I seek to answer the question: How does socialization in the "Online Age" exacerbate the effects of political polarization on the quality of political reasoning? Operationally, I examine how age, online socialization, and social media frequency might moderate these concerning effects on political reasoning.

Literature Review

It is easy to see why politicians, political strategists and scientists would all be interested in understanding how and why people reason and make decisions. Such understandings could be useful not only in predicting voter behavior, but also in deciding how to strategically frame and communicate issues to shape the public's preferences. Currently, research studying the effect elite polarization is having on political reasoning is producing some interesting results (Druckman 2013, Levendusky 2010). At the same time, many new studies the effects of Internet and social media usage are emerging due to the fact that an entire generation has now been socialized using the Internet (Zhong 2011). Combining these two areas of research has yet to be examined and deserves further inquiry.

Before examining what affects political reasoning, it is important to define this concept specifically, as well as preference formation more broadly.

Political reasoning is simply how an individual comes to their opinion on an issue or policy, and the arguments considered in the process. To study political reasoning, most political scientists present participants with policies or issues and gauge their feelings on each. When presented with a policy, individuals compare the choices they have and rank them. However, how they came to their final decision is where new theories and ideas arise (Druckman & Lupia 2000). In political science, those new theories are arising regarding what could affect the decision-making process driving preference formation. An important part of understanding the formation of political opinions is comprehending the different ways individuals think. The

three major types of political reasoning are sequential reasoning, linear reasoning, and systematic reasoning (Rosenberg 2001). Sequential reasoning is a base level understanding of an observed action or event, there is little to no comprehension of context or abstractions and things are only viewed individually, as opposed to as part of a whole. Linear reasoning is simply reasoning in terms of cause and effect, it may be somewhat deeper than sequential reasoning in terms of attributing causation, but still fails to recognize the true complexity of given circumstances. Systematic reasoning takes into account the relationship and complexity of exchanges between all actions and actors in a given situation and the deepest form of reasoning in terms of understanding or evaluating political preference (Rosenberg 2001). There is a clear level of order here in terms of which type of reasoning is preferable with sequential being the least desired, followed by linear reasoning being slightly more preferable, and with systematic reasoning being the deepest and highest of order of reasoning.

Preferences are only formed after the reasoning process, therefore the two concepts are inextricably linked. Along the lines of Druckman & Lupia (2000), I define a preference as "...a comparative evaluation (i.e. a ranking over) a set of objects." While this definition is certainly broad, it does encompass the foundation of preferences and more specifically, political preferences.

More recently, scholars find that polarization is having a major effect on the way people reason about politics. Druckman and colleagues (2013) find that the major parties are diverting rapidly in their ideologies and that this phenomenon is having some effect on overall political reasoning. The effect this phenomenon is having on the reasoning process is complex but overall does not seem to be a positive one. They find that polarization may have some detrimental effects on the quality of opinion formation. Not only did they find that participants place more value on weaker, unsubstantiated arguments in a polarized context, but they also felt more confident about their opinions in this setting. With an informed and thoughtful electorate being a crucial part of a successful democracy, one can easily imagine how this trend could negatively impact our political system.

Similarly, another study found that as elite polarization increased, there were fewer independents and non-ideologues present, more simply there were less moderates, and that partisan concerns are more important to people now than they have been in the past (Thornton 2012). Levendusky (2010) finds polarization causes voters to vote and behave more consistently. While many studies have examined the causes and effects of polarization, there is much left to be done.

While research finds that introducing polarization generally triggers linear reasoning (Druckman 2013, Thornton 2012), studies of the Internet's effect on behavior have been less uniform and/or conclusive. Studies find links between Internet use and psychological well-being (Kraut et. al 1998), personality types and social media usage (Hughes et.al 2011), and even education level and Internet

usage (Van Deursen & Van Dijk 2013). While the amount of research attempting to find correlations between Internet use and behavior or personality is extensive, few have investigated the link between online socialization and reasoning itself.

Studies that do investigate this link finds a relationship between lower social media use more effortful reasoning (Zhong, et.al 2011). While these studies do not speak to the question of causality, they do suggest a link between the two primary variables of interest in my study. Overall, the ideas of polarization reducing the quality of political reasoning and frequent social media users engaging in less effortful reasoning are the most important and relevant findings to this study.

Theory

This study attempts to find a link between online socialization, polarization, and political reasoning. I argue that those socialized online will be more susceptible to polarization's tendency to trigger more linear, lower quality reasoning. Lower quality reasoning is a disproportionate reliance on weak arguments or partisan cues to formulate policy preferences. As mentioned previously, both online reasoning (Zhong et.al 2011) and polarization (Druckman 2013) have been linked to such lower quality reasoning. If it is true that both factors lead to less effortful reasoning, it is reasonable to expect online socialization to exacerbate the effects of polarization such as more linear, less effortful reasoning.

Hypotheses

H1: Participants socialized online will find weaker policy arguments more effective than non-online socialized individuals.

I cite Zhong and colleagues' (2011) finding that people who use social media more often engage in less effortful reasoning to justify this expectation. This finding would indicate that online socialized individuals buy placing more value on weaker, non-substantive arguments are engaging in lower quality reasoning.

H2: Online socialized participants' support for a policy will increase in the direction of their affiliated party's position significantly more so than non-online socialized individuals.

I cite Zhong and colleagues' (2011) finding that people who use social media more often engage in less effortful reasoning to justify this expectation. This finding would indicate that online socialized individuals buy placing more value on weaker, non-substantive arguments are engaging in lower quality reasoning.

While in the presence of party cues to bias participant preferences (Druckman 2013), this movement will be even more dramatic for those socialized online compared to those who were not. This finding would indicate that online socialized individuals place more value on linear party endorsements as opposed to a systematic set of policy arguments.

Methods

To test these hypotheses, I conducted a Qualtrics-built survey experiment and Amazon's Mechanical Turk-recruited participants. First, potential participants from the M-Turk collective would read the terms of the experiment including the offered incentive of \$0.50 for participation. If interested, they would select the "hit" whereby they would then read and agree to the consent form. In order to participate, potential participants were required to be at least 18 years of age, have a U.S. IP address and complete the survey. Once consented, participants were given an external web link taking them to the survey experiment in Qualtrics. Initial survey questions dealt with demographics, SES, and political predispositions. Included was a measure of online socialization: internet/social media use. For example, one question measuring internet usage was "On average, how frequently do you use the internet?" with response choices of never/almost never, less than once a month, a few times a month, a few times a week, about once a day, and several times a day. Participants were also asked at which age they began using the internet. This attempted to tap into the primary concept of *online socialization*, which is the extent to which a person has been exposed to the internet and social media.

Next, participants were presented three pieces of information: a description of the nature of polarization in Congress; two arguments, one for and one against the policy; a description of the policy. First, participants randomly received 1 of 3 polarization descriptions and then, 1 of 4 sets of policy arguments. In the first party polarization randomization, participants received one of the following: no polarization cue, a slight polarization cue of "Democrats in Congress tend to favor the DREAM Act and Republicans in Congress tend to oppose the DREAM Act. However, the partisan divide is not stark as the parties are not too far apart. Also, while Democrats tend to be in favor and Republicans opposed, members of each party can be found on both sides of the issue", or a heavy polarization cue of "Democrats in Congress tend to favor the DREAM Act and Republicans in Congress tend to oppose the DREAM Act. Moreover, the partisan divide is stark as the parties are far apart. Also, not only do Democrats tend to be in favor and Republicans opposed, but most members of each party are on the same side as the rest of their party."

In the second policy argument randomization, participants received one pro argument that was either weak or strong AND one con argument that was either weak or strong. Thus, participants received 1 of the 4 following pairs of policy arguments (strong pro/weak con, strong pro/strong con, weak pro/weak con, and weak pro/strong con). The *strong pro argument* for the DREAM Act was "that it would provide young people with opportunities. They could go on to contribute as doctors, nurses, teachers, soldiers, and police officers." The *strong con argument* against the DREAM Act was "that it encourages illegal immigration due to the expectations of benefits for children of immigrants. This could over-burden the system, leaving many vulnerable individuals." The *weak pro argument* for the DREAM Act was "that it has been a topic in several

public opinion polls. These polls suggest support from many segments of the American population." The *weak con argument* against the DREAM Act was "that it is not well-designed – it could be better. It was driven too much by political concerns in an effort to bring up a controversial issue." These arguments were identical to those used by Druckman (2013) derived from a preliminary survey on argument strength.

The *strong pro argument* for gay marriage was "that it is a matter of equal treatment. Just because some people have a different sexual orientation does not mean they should be denied any of the opportunities or rights that all other Americans enjoy." The *strong con argument* against gay marriage was "that it violates the tradition of marriage as defined for many centuries by the church and civilian governments alike". The *weak pro argument* for gay marriage was "that it has been a topic in several public opinion polls. These polls suggest support from many segments of the American population." The *weak con argument* against gay marriage was "that it is just not right for two people of the same gender to get married". While Druckman (2013) did not examine gay marriage, these gay marriage arguments were created to be similar in content to those used for the DREAM Act in his study.

Next, participants were presented with a brief policy description and then asked to gauge their policy support, to assess the strength of the policy arguments presented, and the importance of the policy to them.

The *DREAM Act* item read: "Since 2001, lawmakers have debated a new immigration law called the Development, Relief, and Education for Alien Minors Act (also called the DREAM Act). The law would allow undocumented immigrants to gain citizenship if they: entered the U.S. before the age of 16, maintained good moral character (e.g., no criminal record), earned a High School Diploma, and completed two years of college OR two years of military service." For *gay marriage*, the survey provided "There has been a lot of recent discussion about gay marriage." This statement was followed by a randomized combination of a polarization statement suggesting that parties either are or are not far apart on the issue, and randomized pro/con arguments for each issue.

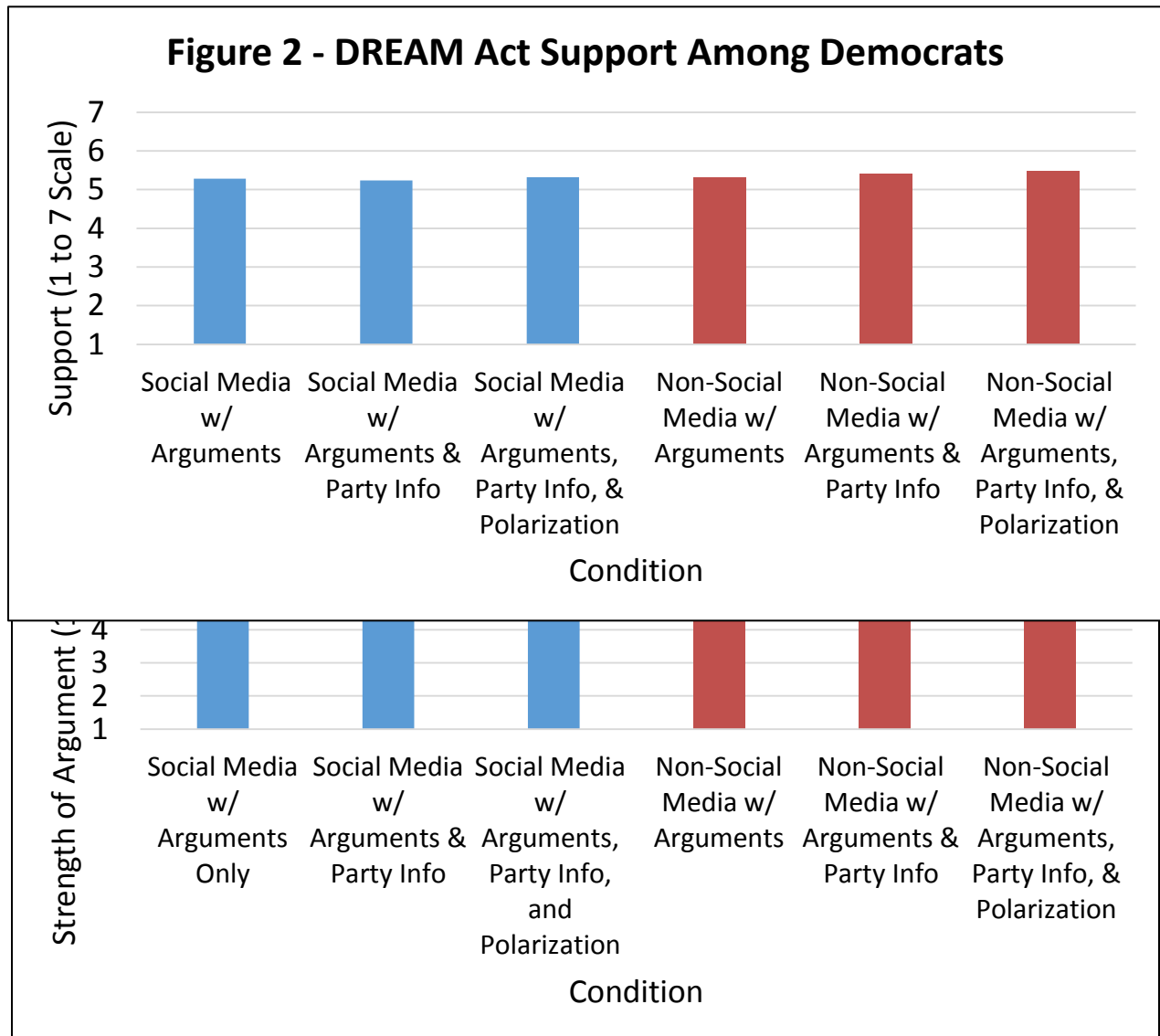
The participants were then asked: 1) "How effective or ineffective did you find the main argument opposed to the DREAM Act/gay marriage?", 2) "How effective or ineffective did you find the main argument in favor of the DREAM Act/gay marriage?", 3) "How important to you is your opinion about the DREAM Act/gay marriage?" Finally, difference of means t-tests and ordinary least squares regression analyses with balance checks were used analyze the data.

Results

T-tests, bivariate regressions, and multiple linear regressions were used to assess each hypothesis.

Hypothesis 1 (see Figure 1)

Figure 2 - DREAM Act Support Among Democrats



To assess the first hypothesis, participants were asked to rank the effectiveness of each argument from 1 to 7 (where 1 was “very ineffective” to 7 “very effective”). The sample was then split by participants’ party identification as well as social media frequency and the reported effectiveness of each argument was compared using a difference of means T-test. If H1 was correct, not only should I expect to find the effectiveness of an argument in favor of the Dream Act to go up when their party and polarization are introduced, but this effect should be heightened among the online socialized.

In short, this did not appear to be the case. In the online socialized group, when parties were introduced, the effectiveness of the pro-argument rose from an average of 4.95 to 5.21, but when polarization was introduced the mean dropped to 5.02 which does not align with our hypothesis or theory. I would expect to find a steady rise in the perceived strength of arguments with each condition, but this was not the case.

Surprisingly, the non-frequent social media group actually behaved more in line with what I would expect from the online socialized. Moving from an average of 4.82 to a 4.97 when parties are introduced and then to 5.06 with

polarization. That said, these results must be used cautiously as none were statistically significant.

Hypothesis 2 (see Figure 2)

To assess the second hypothesis, participants were asked to rank their support for each policy on a 1 to 7 scale (1 being “strongly oppose” and 7 being “strongly support”). The sample was then split by participants’ party identification as well as social media frequency comparing policy support using a difference of means t-test. For our hypothesis to be supported, I would expect to see participants who identified as Democrats support for each policy increase when presented with the party info, and even more so when the party info was combined with polarization.

Again, this was not the case as there were no significant differences between online and non-online socialized participants. When parties were introduced to Democrats who use social media frequently, support actually fell from an average of 5.28 to 5.24. It rose to 5.32 when polarization was introduced but this shift was not statistically significant. As with our first hypothesis, non-frequent social media users actually conformed to our expectations more so than the frequent social media users. While not significant, support increased from 5.32 to 5.4

when arguments were introduced and to 5.48 when polarization was added.

Discussion

While I found a bevy of null results, it is still important to discuss their implications going forward. First, it is certainly possible that there is no correlation between online socialization and political thought. If this is true, this actually presents a much more positive outlook on the future of the Internet and its influence on politics than our hypotheses would suggest. Our theory being that online socialization causes individuals reason in a more linear way does not present the most ideal future for politics--- yet, this did not turn out to be the case.

That said, it must be recognized that design choices were made that may have influenced the findings of this study. We must look for any possible mistakes that could have been made in either the design or implementation of this project. The first possible issue was the distribution of the survey itself. Due to the fact that the survey was only available online, this severely limited my sample to participants who use the Internet and guaranteed I wouldn't have any responses from people who truly never use the Internet. Having participants who never or very rarely used the Internet would certainly be useful in this experiment and the lack of this demographic could have skewed our results.

I found that different arguments and party considerations proposed did not have a significant impact on the overall support for a policy, or the perceived strength of an argument. Therefore, it is possible that the arguments chosen for each policy were ineffective in influencing participants' preferences. Future research using more influential arguments may produce the results I expected.

A final issue would be the choice of policies used to gauge participants' preferences. I chose the DREAM Act due to its use in Druckman's 2013 project and gay marriage was chosen due to its current prevalence in the media. Upon further thought, I realized it may have been more beneficial to the project if the policies used were selected more carefully according to specific criteria. It is possible that our null results were partially due to the fact that the policies used were ones that most people already have a strong opinion on, especially gay marriage. With its current popularity and simplicity, there are not many people who do not already hold a preference on gay marriage and therefore no matter what arguments or framing was presented, a participant would not be influenced by it.

To find a better policy to use for this type of research I thought using a policy that is complex and non-salient would be the best type of policy to issue would be useful in avoiding pre-conceived notions about an issue or policy and all presented arguments to have more of an effect. A complex issue or policy would hold more considerations and a non-salient issue would Neither the DREAM Act nor gay marriage fits this category. Issues that fit this would be campaign finance reform and tax reform. Neither of these issues are salient or a popular subject in the media and it would be easier to find participants that do not already hold a strong opinion on these issues. They are also

very complex issues, increasing the likelihood that I could include information a participant has never considered. Also, because these are complex issues and this research is looking at quality of thought, complex issues would separate those who employ more thoughtful reasoning from those who use less effortful thinking.

Conclusion

While this first cut research produced findings that suggest no link between online socialization and political reasoning, the question is far from resolved. Recognizing that many aspects of this experiment could have been designed differently, additional research to explore this question is certainly warranted. It is important to recognize this is one of the first experiments that seeks to assess the link between online socialization and political reasoning and is in no way conclusive.

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