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Do Different Personality Types Differ in Level of Confirmation Bias?

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DO DIFFERENT PERSONALITY TYPES DIFFER IN LEVEL OF
CONFIRMATION BIAS?

by

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ABSTRACT

The purpose of this research study was to determine if there is a correlation between personality type and level of confirmation bias. Confirmation bias is the idea that people are more likely to agree with opinions already similar to their own and they will actively seek out that opinion. The NEO Five Factor Inventory was administered to determine the subjects' levels in openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The Confirmation Inventory was administered to determine the level of confirmation bias. It was predicted that people high in openness will score low in confirmation bias; people who score high in conscientiousness will score high in confirmation bias; high levels of agreeableness will result in low scores of confirmation bias; and the final hypothesis is people who score high in neuroticism will also score high levels of confirmation bias. It is predicted that a person's level of extraversion will not affect their level of confirmation bias. The low participant number caused non-significant results. Overall, no significant differences were found that illuminate the relationship between confirmation bias and personality. None of the comparisons were found to be significant at the .01 level.

Keywords: Confirmation bias, NEO-FFI, CI, echo chambers

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INTRODUCTION

The 2016 election revealed a problem in America labeled the "fake news crisis" (Balmas 2014). According to multiple research studies, people selectively analyze messages that they encounter to fit preexisting attitudes (Ditto & Lopez, 1992; Kunda, 1990; Taber & Lodge, 2006). This recently became an issue as Americans scrolled through their social media feed and were presented with false data and unverified accusations for both candidates. For example, Trump was accused of saying "If I were to run, I'd run as a Republican. They're the dumbest group of voters in the country. They believe anything on Fox News. I could lie and they'd still eat it up. I bet my numbers would be terrific." His statement was later found to be false. Clinton was accused of laughing at a rape victim, which was also found to be untrue (NPR Staff 2016).

One of the most pernicious aspects of this fake news crisis has been that each side is primarily hearing or being exposed to false data from their own political viewpoint. *The Wall Street Journal* brought this point to light before the election. Barberá, Jost, Nagler, Tucker, and Bonneau, (2015) expressed concern that social networks can create "echo chambers," by which social media users are subject to seeing posts only from like-minded friends and family. Research suggests that information confirming existing worldviews gets accepted even if the information is proven false; whereas information that is nonconforming is sometimes ignored and might even increase group divergence (Bessi 2016).

One of the classic studies researching media effects found that media content serves to support existing beliefs (Klapper, 1960). This is consistent with the recent concerns about "echo chambers." Conforming beliefs and values are important motivators of media content and channels that are chosen (Slater 1997). In other words, people are more likely to follow media sources that confirm their already held beliefs. Moreover, Slater (2007) finds that even the

attention paid to content varies depending on whether conforming or nonconforming information is presented.

The present study investigates the relationship between personality type and level of confirmation bias. *Confirmation bias* is defined by Rajsic, Wilson, & Pratt (2015) as the observation that people are more likely to actively seek out and agree with ideas that are already similar to their own. A person shows confirmation bias by actively seeking out information that conforms to their own beliefs, often ignoring information that supports the opposite view. Confirmation bias also involves negative feelings toward those opinions that are different from our own and is usually an unconscious phenomenon. Therefore, people may not always be aware of it. Biases influence behavior more than most people would like to admit. (Teal, Gill, Green, & Crandall, 2012). Ignoring information that disagrees with presently accepted opinions is dangerous because this limits our ability to obtain accurate and innovative knowledge. Confirmation bias occurs in many situations including political opinions, opinions about science, and beliefs about a person or group.

Previous studies have documented how people often skew information to adhere to their beliefs. Frost, Casey, Griffin, Raymundo, Farrell, and Carrigan (2015) found that participants in their study were more likely to remember information that already adheres to their beliefs. Undergraduate students were recruited and shown 12 social media posts, either pro-gun or anti-gun, and were asked if the posts were written by a friend or a stranger. When the posts were consistent with the participant's view on gun control, the participants were more accurate at identifying whether the message was from a friend or a stranger. This illustrates the dangers of confirmation bias. Since participants in this study were more likely to remember information that adheres to their beliefs, it is extremely possible for false information to be spread in this manner.

When it came to the posts that they did not agree with, the participants were more likely to make mistakes as to who wrote the post (Frost, Casey, Griffin, Raymundo, Farrell, & Carrigan, 2015).

Confirmation bias seems to be demonstrated at an early age by children seeking out intimidating evidence. Muris, Debipersad, & Mayer (2014) showed that children with high levels of anxiety seek out threatening information. The authors recruited children through primary schools and compared children with low levels of anxiety and children with higher levels of anxiety. Children with high levels of anxiety held a stronger tendency towards verification of their beliefs and a weaker inclination towards falsifying their beliefs (Muris, Debipersad, & Mayer, 2014). In other words, children who have high levels of anxiety also have a predisposition to a higher level of confirmation bias.

Confirmation bias is a prevalent and problematic bias. Even psychiatrists have been known to show some level of confirmation bias. Diagnostic errors are known to happen when psychiatrists ignore data in order to confirm a certain diagnosis (Mendel, Traut-Mattausch, Jonas, Leucht, Kane, Maino & Hamann, 2011). They are likely to find information to support a certain belief and ignore contradicting information. It is important that psychiatrists and other medical professionals are aware of confirmation bias and know how to reduce or get rid of that bias. Warning medical professionals about confirmation bias and the dangers of the bias may reduce diagnostic errors.

While confirmation bias has been shown to be widespread, it may not be equally as prevalent in all individuals. One factor that may influence susceptibility to confirmation bias is personality. According to one of the most established personality theories, the Five Factor Model (Costa & McRae 1992) personality is comprised of five different facets: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

According to Costa & McRae (1992), people who score high in the *openness* category are more likely to be tolerant of other people's opposing world views. People who score high in openness are also considered to be intellectual, curious, and imaginative. A study by Brandt, Chambers, Crawford, Wetherell, and Reyna (2015) established a connection between openness and tolerance. In order to test levels of tolerance, participants rated different presidential candidates from 0-100 on cold-warm. Participants low in openness expressed greater intolerance for the groups that were targeted overall (Blacks, Whites, Hispanics, and Muslims) than the participants who scored high in openness. However, for conventional target groups (Catholic, Jew, Muslim, Person with no religion, Evangelical or "born again" Christian, Woman, Gay or Lesbian, Black, and Hispanic), openness was unrelated to intolerance.

Conscientiousness is defined as being resolute, trustworthy, and dependable (Costa & Mcrae 1992). For example, people who are thought to be high in conscientiousness are organized, motivated, and ambitious. Sears and Rowe (2003) found a relationship between confirmation bias and conscientiousness by exposing differences in a "similar-to-me" effect. The researchers studied relationships between interviewers and interviewees, and found that interviewers had more positive opinions about their counterparts who had traits similar to themselves. In other words, they found a favorable relationship between similar interviewer/interviewee pairs. This similar-to-me effect appeared to be most evident in high conscientiousness raters, suggesting individuals who score high in conscientiousness are more likely to relate to and accept people with ideas similar to their own, which may be related to higher levels of confirmation bias.

People who score higher in levels of *agreeableness* are thought to be more trusting than their less agreeable counterparts (Graziano, Bruce, Sheese, & Tobin, 2007; Graziano, Hair, &

Finch, 1997; Graziano, Habashi, Sheese, & Tobin, 2007). People who score high in agreeableness are also liked better by their friends when compared to the less agreeable population. According to multiple sources, people who score high in agreeableness have more friends, are more likely to avoid conflict, are less prejudiced, and more empathetic (Graziano, Bruce, Sheese, & Tobin, 2007; Graziano, Hair, & Finch, 1997; Graziano, Habashi, Sheese, & Tobin, 2007). A byproduct of these traits might be lower levels of confirmation bias. A less prejudiced person may be less likely to show biased behavior when compared to someone who has a higher level of prejudice.

People who have higher levels of *neuroticism* are known to possess limited empathy, have a higher need for control, and be less likely to help others (Jonason, 2014). Neurotic people are also more manipulative, have a higher sense of entitlement and dishonesty. It is predicted that people who score high on neuroticism will also score higher levels of confirmation bias. Highly neurotic people are thought to be extremely anxious which may result in reluctance to change their mind or accept new ideas. A person who is unwilling to change their mind or accept new ideas may also be more likely to keep a certain mindset.

Individuals high in *Extraversion* are characterized as energetic, assertive, outgoing, enthusiastic, and adventurous individuals (John & Srivastava, 1999). Extraverts are thought to be more involved in politics but it is predicted their social ability will not determine their levels of confirmation bias. Orpen (1971) found no correlation between extraversion and "culturally disapproved" views. This supported their argument against correlation between attitudes and societal approval or disapproval. The results suggested that cultural background has a bearing on the relationship between extraversion and tough-mindedness. It will be highly unlikely to be able to determine level of confirmation bias from just mere social skills.

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The primary purpose of this study is to determine whether there is a relationship between personality type and levels of confirmation bias. The following hypotheses were generated:

Hypothesis 1: There will be a negative correlation between openness and confirmation bias; i.e. participants who score high on levels of openness will score lower levels of confirmation bias.

Hypothesis 2: There will be a positive correlation between conscientiousness and confirmation bias; i.e. participants who score high in conscientiousness will score high on levels of confirmation bias.

Hypothesis 3: There will be a negative correlation between agreeableness and confirmation bias; i.e. participants who score high in agreeableness will score low in confirmation bias.

Hypothesis 4: There will be a positive correlation between neuroticism and confirmation bias; i.e. highly neurotic people will score high levels of confirmation bias.

Hypothesis 5: there will be no difference in levels of confirmation bias regarding extraversion.

METHOD

PARTICIPANTS

This study included 40 participants. All participants were over the age of 18. Participants were recruited from the University of Central Florida through the Psychology Department's on-line recruitment website, SONA http://ucf.sona-systems.com/. The link to the study was also posted to a private Facebook page in order to add a more diverse participant group. All participants recruited through the UCF SONA system were awarded 0.5 credit point for their participation toward a course requirement. Participants recruited through Facebook were strictly volunteers. The breakdown of ethnicities was 10.7% Asian, 14.3% Black or African American, 7.1% who reported other and 67.9% participants who identified as white. The mean age was 20.48, SD = 2.22. Sixty-seven percent of the sample was female whereas 33% was male. Most of the participants (55%) identified as Democrat; 25% identified as Independent; 15% identified as Republican; and 5% identified as other.

MATERIALS

NEO FIVE FACTOR INVENTORY (NEO-FFI-R; Costa & McCrea, 1992) The Neo-Five Factor Inventory includes 63 questions designed to measure 5 personality factors: Openness, Conscientiousness, Agreeableness, Neuroticism, and Extraversion. All items are rated on a 5 point likert scale from *Strongly Agree* to *Strongly Disagree*. Items on this test include:

I believe in the importance of art. (Openness)

I am always prepared. (Conscientiousness)

I have a good word for everyone. (Agreeableness)

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I often feel blue. (Neuroticism)

I feel comfortable around people. (Extraversion)

Estimates of Cronbach's alpha (reliability) for this inventory ranged from .63 for Openness to Experience, .82 for Conscientiousness, .72 for Agreeableness to .81 for Neuroticism and .82 for Extraversion (Körner, Czajkowska, Albani, Drapeau, Geyer, & Braehler, 2015). The inventory is included in Appendix A.

CONFIRMATION INVENTORY (CI; Rassin 2008). A 10 item self-report measure of proneness towards confirmation bias. All items are rated on a five point likert scale from Strongly Agree to Strongly Disagree. An example of an item on the test is, *"I only need a little information to reach a good decision"* (Rassin 2008).The Cronbach's alpha (reliability) of the CI is 0.65. The scale is provided in Appendix B.

VIGNETTES AND WRITING PROMPTS. Each participant was assigned to one of two vignettes. These vignettes depict exactly the same scenario, a political candidate whose platform is to increase the availability for jobs after graduation. This scenario was chosen because it is likely to be an issue that would interest college students, and is not especially controversial in nature. The only difference between the vignettes in each condition was that the candidate in question was identified as either a Republican candidate in one condition or a Democrat in the other. Beneath the scale, the participants could write about what they read. This was to reinforce the candidate and issue. Participants are required to write in order to eliminate any biases from the Confirmation Inventory, since it is a self-report scale.

LIKERT SCALE. This is to test how much a participant agrees with the candidate's view from each vignette. All items are rated on a 5 point likert scale from *Strongly Agree* to *Strongly Disagree*. This scale is included in Appendix E.

DEMOGRAPHIC SCALE. A demographic questionnaire was administered to collect basic demographic information, which included educational level, major, age, and political affiliation. Also, a manipulation check was included in this scale to omit students who didn't read or recognize the candidate's political affiliation. The question asks what the political affiliation of the candidate from the vignette was. This scale is included in Appendix D.

PROCEDURE

Participants were informed that they are going to take part in a research study regarding student opinions and personality. The study was available online only. Participants were able to complete the study from any computer with internet access during the time the study was available. The participants were first instructed of the procedure of the study and then indicated consent, participants were assigned to one of the two vignettes. The first half of the participants were assigned to the Democratic vignette and the remaining half were assigned to the Republican vignette. The vignettes were identical except for the political party of the candidate. They were instructed to take as much time as they need to read the vignette. When they finished reading, they were instructed to write about what they think of the candidate and given a window-box prompt. They had as much time as they need to write their thoughts. When they finished, they were prompted to rate how much they agree or disagree with the candidate's view on a 5 point scale. After they completed these tasks, they took the NEO-Five-Factor Inventory followed by the Confirmation Inventory. Finally, they were directed to fill out the demographic scale. As a manipulation check, they were asked whether the candidate was a Republican or Democrat.

RESULTS

Though forty participants completed the survey, there were 28 participants in the final analysis. Ten participants were omitted because they self-identified as *Independent* or *other* for their political affiliation. An additional 3 participants were omitted for failing the manipulation check. One participant identified as Independent as well as failing the manipulation check. Our results were consistent but nothing was significant because of the low participant amount.

RATINGS OF CANDIDATES. There were too few participants to test the responses to the candidate in the vignettes as a function of personality, but the overall degree of confirmation bias was tested. A chi-square goodness of fit was conducted on the ratings of the fictional candidate. This analysis simply compared those whose assigned vignette matched their political party (for example, Democrat-Democrat or Republican-Republican) and those who didn't (Democrat-Republican or vice versa) - so it was a 2 (matched or didn't) X 5 (rating 1-5) chi square. The results were not significant $X^2(3) = 0.134$, $p = .13$. However, there was a trend in the data. Participants rated the candidate more favorably when the political party matched the fictional candidates, $Mdn = 5.0$, $IQR = 1.0$; compared to when there was a mis-match $Mdn = 4.0$, $IQR = 2.0$, which is consistent with the previous finding on confirmation bias.

PERSONALITY. Pearson Bivariate Correlations were performed on CBI with all 5 personality variables. Due to the high number of inter-correlations, a Bonferroni correction was performed and the alpha level was adjusted to .01. The only relationship that approached significance was between Openness and the CI, $r = .389$, $p = .04$; however the predicted relationship was negative and the analysis revealed a positive relationship. The relationship between consciousness and the CI was predicted to be positive, and it was; however it was not significant, $r = .047$, $p = .811$. The relationship between agreeableness and the CI was predicted to be negative, instead it was positive though not significant, $r = .122$, $p = .535$. The relationship between neuroticism and the CI was predicted to be positive, however it was negative though not significant, $r = -.202$, $p = .303$. There was not expected to be a relationship between Extraversion and the

CI, and no significant relationship was found. The means and standard deviations for the scales are

reported in Table 1.

Table 1 Means and Standard Deviations of the Five Factor Inventory scores

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness	CBI
Mean	25.9286	28.4643	28.9286	30.8929	31.3929	32.8929
Standard Deviations	8.17824	5.37127	6.04874	4.87882	6.91932	4.20176

Table 2 Correlational Matrix between the Five Factor Inventory and CBI.

	N	*E*	*O*	*A*	*C*	*CBI*
N	1					
E	-0.24	1				
O	-0.07	0.10	1			
A	-0.26	0.13	0.00	1		
C	-0.35	0.22	0.24	0.51	1	
CBI	-0.20	0.09	0.39	-0.12	0.05	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

Overall, no significant differences were found that illuminate the relationship between confirmation bias and personality. None of the comparisons were found to be significant at the .01 level. It is noteworthy that the only relationship that approached significance was in the opposite direction, with openness to experience, which is often found to have strong negative relationships with prejudice and other negative social biases (Brandt, Chambers, Crawford, Wetherell, & Reyna, 2015). There were only 28 participants in the final analysis, so it is unclear whether or not the relationships discovered in the analysis will be maintained as more data is collected.

Another issue is that there were many more participants who identified as Democrat – so this analysis was mostly for democrats reading a vignette about someone of the same or different party. The results for overall confirmation bias are consistent though not significant. When the party matched the participants, they rated the candidate more favorably even though the issue was the same.

LIMITATIONS

A limitation of this study was that originally the vignettes were supposed to be randomly assigned, but because of a computer glitch the first half of the participants were assigned to the Democratic candidate and the second half of participants were assigned to the Republican candidate. Another glaring limitation of this study is the low participant number. More participants may have revealed significant differences. The purpose of this study was to explore whether personality plays a role in confirmation bias. This is an important question, especially in this era of social media and "echo chambers." Hopefully more data will shed more light on this question and eventually lead to ways if teaching people to overcome this pernicious bias.

APPENDIX A. NEO-FIVE FACTOR SCALE

Instructions

Please rate how accurately each of the following statements describes you using the 1-5 rating scale where (1) is "Strongly Disagree," (2) is "Disagree," (3) is "Neutral," (4) is "Agree," and (5) is "Strongly Agree."

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. I am not a worrier.
2. I like to have a lot of people around me.
3. I don't like to waste my daydreaming.
4. I try to be courteous to everyone I meets.
5. I keep my belongings neat and clean.
6. I often feel inferior to others.
7. I laugh easily.
8. Once I find the right way to do something, I stick to it.
9. I often get into arguments with my family and co-workers.
10. I am pretty good about pacing myself so as to get things done on time.
11. When I am under a great deal of stress, sometimes I feel like I am going to pieces.
12. I don't consider myself especially "light-hearted".
13. I am intrigued by the patterns I find in art and nature.
14. Some people think I am selfish and egotistical.
15. I am not a very methodical person.
16. I rarely feel lonely or blue.
17. I really enjoy talking to people.
18. I believe letting students hear controversial speakers can only confuse and mislead them.
19. I would rather cooperate with others than compete with them.
20. I try to perform all the tasks assigned to him/her conscientiously.
21. I often feel tense and jittery.
22. I like to be where the action is.
23. Poetry has little or no effect on me.
24. I tend to be cynical and skeptical of others' intentions.
25. I have a clear set of goals and works toward them in an orderly fashion.
26. Sometimes I feel completely worthless.
27. I usually prefer to do things alone.
28. I often try new and foreign foods.
29. I believe that most people will take advantage of you if you let them.
30. I waste a lot of time before settling down to work.
31. I rarely feel fearful or anxious.

32. I often feel as if they're bursting with energy.
33. I seldom notice the moods or feelings that different environments produce.
34. Most people I know like them.
35. I work hard to accomplish my goals.
36. I often get angry at the way people treat me.
37. I am a cheerful, high-spirited person.
38. I believe we should look to our religious authorities for decisions on moral issues.
39. Some people think of I am cold and calculating.
40. When I make a commitment, I can always be counted on to follow through.
41. Too often, when things go wrong, I get discouraged and feels like giving up.
42. I am not a cheerful optimist.
43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
44. I am hard-headed and tough-minded in my attitudes.
45. Sometimes I am not as dependable or reliable as I should be.
46. I am seldom sad or depressed.
47. My life is fast-paced.
48. I have little interest in speculating on the nature of the universe or the human condition.
49. I generally try to be thoughtful and considerate.
50. I am a productive person who always gets the job done.
51. I often feel helpless and want someone else to solve my problems.
52. I am a very active person.
53. I have a lot of intellectual curiosity.
54. If I don't like people, I let them know it.
55. I never seem to be able to get organized.
56. At times I have been so ashamed I just wanted to hide.
57. I would rather go my own way than be a leader of others.
58. I often enjoy playing with theories or abstract ideas.
59. If necessary, I am willing to manipulate people to get what I want.
60. I strive for excellence in everything I do.

APPENDIX B. CONFIRMATION INVENTORY

Instructions: Choose a number 1-5 with 1 being the least like you and 5 being the most like you.

1. I only need a little information to reach a good decision.

2. My first impression usually seems to be correct.

3. I usually quickly know the ends and outs of the matter.

4. Some things are simply the way they are, regardless of other people's counter arguments.

5. Sometimes, I know things before there is actual proof of them.

6. I usually trust my intuition.

7. The first blow is half the battle.

8. Generally, half a word is enough for me.

9. If my reasoning and the physical evidence are in contradiction, I tend to give weight to my reasoning than to the evidence.

10. Once I have a certain idea, I can hardly be brought to change my mind.

APPENDIX C. VIGNETTES

VIGNETTE A

Please take 5 minutes to write your thoughts and feelings about this candidate.

This election year, the republican candidate for mayor is standing outside of the University of Central Florida to show support for increasing jobs after graduation. This celebrated right-wing candidate is concerned about the decreasing employment rate of students after graduation. Only 40% of students graduating with their four year degrees obtain jobs after graduation. This candidate feels there aren't enough opportunities for students once they graduate with their four year degree. Supporters within the party generated multiple solutions to increase the positions available for students, including policies encouraging partnerships between universities and local businesses. Another solution created by republican supporters is to hold more job fairs. They also want to increase the amount of resources available on the internet to help students. Republicans, especially this mayoral candidate, are proud of the work they have done on this project and feel that everyone – including students, businesses, and state run institutions will benefit as a result of these initiatives.

VIGNETTE B

Please take 5 minutes to write your thoughts and feelings about this candidate.

This election year, the democratic candidate for mayor is standing outside of the University of Central Florida to show support for increasing jobs after graduation. This celebrated left-wing candidate is concerned about the decreasing employment rate of students after graduation. Only 40% of students graduating with their four year degrees obtain jobs after graduation. This candidate feels there aren't enough opportunities for students once they graduate with their four year degree. Supporters within the party generated multiple solutions to increase the positions available for students, including policies encouraging partnerships between universities and local businesses. Another solution created by democratic supporters is to hold more job fairs. They also want to increase the amount of resources available on the internet to help students. Democrats, especially this mayoral candidate, are proud of the work they have done on this project and feel that everyone – including students, businesses, and state run institutions will benefit as a result of these initiatives.

APPENDIX D. DEMOGRAPHIC SCALE

What is your age? _____

What is your gender?

Male

Female

Other

What is your major? _____

Which year in school are you?

Freshman

Sophomore

Junior

Senior

Graduate Student

Are you of Hispanic, Latino, or Spanish origin?

Yes

No

What race do you best identify with?

White

Black or African American

American Indian and Alaska Native

Asian

Native Hawaiian and Other Pacific Islander

Other race

What do you consider your political affiliation?

Democrat

Republican

Independent

Other

Was the candidate from the vignette Republican or Democrat?

Republican

Democrat

APPENDIX E. LIKERT SCALE

Please rate the candidate on their views on jobs after graduation on a scale of I-5.

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

REFERENCES

Balmas, M. (2014). When fake news becomes real: Combined exposure to multiple news sources

    and political attitudes of inefficacy, alienation, and cynicism. *Communication Research*,

    41(3), 430-454.

Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to

    right: Is online political communication more than an echo chamber? *Psychological*

    Science, *26*(10), 1531-1542.

Bessi, A. (2016). Personality traits and echo chambers on Facebook. *Computers in Human*

    Behavior, 319-324

Brandt, M. J., Chambers, J. R., Crawford, J. T., Wetherell, G., & Reyna, C. (2015). Bounded

    openness: The effect of openness to experience on intolerance is moderated by target

    group conventionality. *Journal of Personality and Social Psychology, 109*(3), 549-568.

Boudreaux, M. J. (2016). Personality-related problems and the five-factor model of personality.

    Personality Disorders: Theory, Research, and Treatment, 7(4), 372-383.

Cooper, C. A., Golden, L., & Socha, A. (2013). The big five personality factors and mass

    politics. *Journal of Applied Social Psychology, 43*(1), 68-82.

Costa, P. T., Jr., & McCrae, R. R. (1992). The five-factor model of personality and its relevance

    to personality disorders. *Journal of Personality Disorders, 6*(4), 343-359.

Ditto, P. H., and D. F. Lopez. 1992. "Motivated Skepticism: Use of Differential Decision Criteria

    for Preferred and Nonpreferred Conclusions.*" Journal of Personality and Social*

    Psychology 63:568–84.

Frost, P., Casey, B., Griffin, K., Raymundo, L., Farrell, C., & Carrigan, R. (2015). The influence
of confirmation bias on memory and source monitoring. *Journal of General Psychology,
142*(4), 238-252.

Graziano, W. G., Bruce, J., Sheese, B. E., & Tobin, R. M. (2007). Attraction, personality, and
prejudice: Liking none of the people most of the time. *Journal of Personality and Social
Psychology*, *93*, 565–582.

Graziano, W. G., Habashi, M. M., Sheese, B. E., & Tobin, R. M. (2007). Agreeableness,
empathy, and helping: A Person × Situation perspective. *Journal of Personality and
Social Psychology*, *93*, 583–599.

Graziano, W. G., Hair, E. C., & Finch, J. F. (1997). Competitiveness mediates the link between
personality and group performance. *Journal of Personality and Social Psychology*, *73*,
1394–1408.

Jonason, P. K. (2014). Personality and politics. Personality and Individual Differences, 71181-
184.

Klapper, J. T. (1960). *The effects of mass communication*. New York, NY, US: Free Press.

Knobloch-Westerwick, S., Mothes, C., Johnson, B. K., Westerwick, A., & Donsbach, W. (2015).
Political online information searching in Germany and the United States: Confirmation
bias, source credibility, and attitude impacts. *Journal of Communication, 65*(3), 489-511.

Körner, A., Czajkowska, Z., Albani, C., Drapeau, M., Geyer, M., & Braehler, E. (2015).
Efficient and valid assessment of personality traits: Population norms of a brief version of

the NEO Five-Factor Inventory (NEO-FFI). *Archives of Psychiatry and Psychotherapy, 17*(1), 21-32.

Kunda, Z. 1990. "The Case for Motivated Reasoning." *Psychological Bulletin,* 108:480–98.

Maurer, M., & Reinemann, C. (2006). Learning versus Knowing: Effects of Misinformation in Televised Debates. *Communication Research, 33*(6), 489-506.

Mendel, R., Traut-Mattausch, E., Jonas, E., Leucht, S., Kane, J. M., Maino, K., & ... Hamann, J. (2011). Confirmation bias: Why psychiatrists stick to wrong preliminary diagnoses. *Psychological Medicine, 41*(12), 2651-2659.

Muris, P., Debipersad, S., & Mayer, B. (2014). Searching for danger: On the link between worry and threat-related confirmation bias in children. *Journal of Child and Family Studies, 23*(3), 604-609.

NPR Staff (2016). The Story Behind A Campaign Line: Did Clinton Laugh At A Rape Victim? Npr.org

Orpen, C. (1971). The relationship between extraversion and tough-mindedness in a 'tough-minded' culture. *The Journal of Psychology: Interdisciplinary and Applied*, *78*(1), 27-29.

Parks-Leduc, L., Feldman, G., & Bardi, A. (2015). Personality traits and personal values: A meta-analysis. *Personality and Social Psychology Review, 19*(1), 3-29.

Pervin, L.A., & John, O.P., (Eds.), Handbook of Personality: Theory and research (2nd ed.), The Guilford Press, New York, NY (1999), pp. 102–138.

Rajsic, J., Wilson, D. E., & Pratt, J. (2015). Confirmation bias in visual search. *Journal of Experimental Psychology: Human Perception and Performance, 41*(5), 1353-1364.

Rassin, E. (2008). Individual differences in the susceptibility to confirmation bias. *Netherlands Journal of Psychology, 64*(2), 87-93.

Sears G. J., Rowe, P. M., (2003). A personality-based similar-to-me effect in the employment interview: Conscientiousness, affect-versus competence-mediated interpretations, and the role of job relevance. *Canadian Journal of Behavioral Science, 35*(1), 13-24.

Slater, M. D. *(*1997*).* Persuasion processes across receiver goals and message genres. *Communication Theory*, 7*, 125–148.*

Slater, M. D. (2007). Reinforcing spirals: The mutual influence of media selectivity and media effects and their impact on individual behavior and social identity. *Communication Theory*, *17*(3), 281-303.

Teal, C. R., Gill, A. C., Green, A. R., & Crandall, S. (2012). Helping medical learners recognise and manage unconscious bias toward certain patient groups. Medical Education, 46(1), 80-88.

Thomsen, D. K., Olesen, M. H., Schnieber, A., & Tønnesvang, J. (2014). The emotional content of life stories: Positivity bias and relation to personality. *Cognition and Emotion, 28*(2), 260-277.

Taber, C. S., and M. Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50:755–69.