

Spring 5-1-2020

Do Narcissism levels affect conflict resolution when their ego is threatened? An Experiment

Laura E. Harper
Western University, lharper6@uwo.ca

Follow this and additional works at: https://ir.lib.uwo.ca/psychd_uht



Part of the [Social Psychology Commons](#)

Recommended Citation

Harper, Laura E., "Do Narcissism levels affect conflict resolution when their ego is threatened? An Experiment" (2020). *Undergraduate Honors Theses*. 48.
https://ir.lib.uwo.ca/psychd_uht/48

This Dissertation/Thesis is brought to you for free and open access by the Psychology Department at Scholarship@Western. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of Scholarship@Western. For more information, please contact wlsadmin@uwo.ca.

Do Narcissism levels affect conflict resolution when their ego is threatened? An Experiment

Laura Harper

Honours Psychology Thesis
Department of Psychology
University of Western Ontario
London, Ontario, CANADA
April, 2019

Thesis Advisor: Donald Saklofske, Ph.D.

Abstract

The present experimental study, examined the influence of ego-threat on participant aggression levels, and investigated whether Narcissism moderated this relationship. A sample of N= 54 undergraduate participants were randomly assigned to receive either positive or negative feedback on their writing abilities from what they were told was a co-participant, with the negative feedback condition serving as the ego-threat condition. Afterwards, participants responded to a hypothetical conflict scenario involving the imagined co-participant and completed a self-report measure of Narcissism online. Results showed that being assigned to the ego-threat condition resulted in more aggressive responses to the conflict scenario, increased use of forcing as a conflict resolution strategy, and a more negative impression of the imagined co-participant. However, neither Narcissism, nor the interaction between Narcissism and the ego-threat condition had a significant effect on the dependent variables, which fails to replicate a key finding in previous studies. Implications for the relationship between ego-threat and Narcissism are discussed.

Do Narcissism levels affect conflict resolution when their ego is threatened? An Experiment

Being insulted by others is not an enjoyable experience. Whether those insults are mean comments online or people talking about you behind your back, receiving negative assessments about the self can have negative effects on mood and subsequent behaviour. However, if a person's self-esteem is unrealistically high, to the point where they feel a need to constantly assert authority over others, their response to such negative evaluations is likely to be more severe. This need to maintain high self-esteem is commonly associated with people high on an individual difference variable called Narcissism (Paulhus & Williams, 2002). Narcissism is a maladaptive personality trait that combines with other personality traits to form the dark triad/tetrad (Furham, Richards & Paulhus, 2013; Jakobwitz & Egan, 2006; Paulhus & Williams, 2002). These traits include Machiavellianism, psychopathy, Narcissism and sadism (Book et al. 2016; Međedović & Petrović, 2015). Previous studies have found that when a person's self-image is threatened, it is more likely to trigger people who score highly in Narcissism, and make them more likely to aggress, compared to those who are not and people high in other traits of the dark tetrad (Bushman & Baumeister, 1998; Jones & Paulhus, 2010; Stucke & Sporer, 2002). However, no study to my knowledge has looked at the interpersonal conflict resolution behaviour of people high in Narcissism after receiving an ego-threat.

In the present paper, before discussing the current study, I will describe some of the past literature on the dark tetrad (focusing specifically on Narcissism), examine how people who score highly on Narcissism react to interpersonal conflict and a type of personal insult called ego-threat. In addition, I will review methods used to measure aggression in these studies.

Narcissism and The Dark Tetrad

It has been well established in previous literature that all of the dark tetrad traits are associated with disagreeableness, emotional coldness, and aggressiveness (Paulhus & Williams, 2002). However, each trait also has unique attributes. For example, psychopathy involves thrill seeking, impulsiveness, low empathy, antisocial behaviour and interpersonal aggression (LeBreton, Binning, & Adorno, 2006), while people who score high in Machiavellianism are characterized by manipulative social behaviour, including use of deceptive techniques such as lying (Geis & Moon, 1981). Meanwhile, individuals high in sadism tend to enjoy being cruel to others and actively seek opportunities for cruelty (Buckels, Jones, & Paulhus, 2013; Baumeister & Campbell, 1999). Finally the trait of sub-clinical Narcissism contains many of the same elements as it's clinically diagnosable counterpart; namely a sense of grandiosity, dominance, entitlement, (Campbell, Bonacci, & Shelton, 2004) and superiority (Raskin & Hall, 1979) and is characterized as the attempt to regulate and maintain unrealistically high self-esteem (Raskin, Novacek, & Hogan, 1991b; Robins & John, 1997). Previous research has found that people with high levels of Narcissism are less committed to their romantic partners (Campbell, & Foster, 2002), use social networking sites to maintain the sense of superiority more frequently (Panek, Nardis & Konrath, 2013), and also behave in more aggressively in response to an ego-threat (Bushman & Baumeister, 1998; Jones & Paulhus, 2010; Stucke & Sporer, 2002).

As mentioned previously, while traits of the dark triad have some common similarities such as general disagreeableness and aggressive behaviour (Jonason & Webster, 2010), they are associated with varied responses to threatening stimuli. A study by Jones and Paulhus (2010), studied how different types of threats to the self, an ego-threat versus a physical-threat, affected those high in psychopathy, Machiavellianism and Narcissism (those high in sadism were not

studied). In their study, all participants were asked to write an essay as part of the experiment. Participants in the ego-threat condition were randomly assigned to either receive positive or negative feedback on their essay. Afterwards, participants were required to play a competitive computer game with their co-participant and were told the slower they were the greater the intensity of white noise they would receive, set by their co-participant. However, the levels of white noise administered to the participant were actually controlled by the experimenter, creating the physical-threat condition. They found that those who score high on Narcissism reacted aggressively in response to an ego-threat (negative feedback on their writing) as shown by blasting their partners with white noise during the game, but had non-significant responsivity to the physical-threat. Meanwhile, psychopaths tended to react aggressively only toward a physical-threat (Jones & Paulhus, 2010), and Machiavellians did not aggress in response to either the ego or physical provocation. These findings imply that despite conceptual overlap between the traits of the dark triad, individuals who exclusively score high on just one of the three traits tend to aggress in response to different triggers.

Narcissism and Aggression

Aggression is defined as any behaviour that aims to harm another person either physically or emotionally (Anderson & Bushman, 2002). Aggression in those high in Narcissism in response to an ego-threat has been widely studied among the dark triad literature. Ego-threat is defined as any threat to one's self esteem (Leary, Terry, Batts Allen, & Tate, 2009).

It is often recognized that frustration, and resultant negative affect, can lead to aggressive responding. This is known as the frustration-aggression hypothesis, a theory of aggression which has gone through multiple revisions (see Dollard, Miller, Doob, Mowrer & Sears, 1939; Berkowitz, 1989; Elson & Breuer, 2017). This theory outlines the process of aggression from an

initial stimulus that induces frustration. The negative affect resulting from frustration leads to aggressive inclinations, and subsequently to aggressive behaviour (Berkowitz, 1989). This theory also specifically states that in between these steps there are individual differences and extraneous variables that contribute to whether someone continues to the next step or not. One example of such an individual difference is Narcissism. For example, Schnieders and Gore (2011) showed that individuals higher on Narcissism reacted to frustration or threatening conditions with more interpersonal aggression in the form of prejudice towards immigrants. Within this framework, there are many studies that assess how Narcissism contributes to aggressive responding.

A study by Chester and DeWall (2016) showed that participants who scored highly on Narcissism behaved aggressively when their egos were threatened by interpersonal insults. In their experiment, participants were required to play a ball tossing cyberball game with two other players on a computer (who were part of the computer program used to evoke the ego-threat, and not actual participants). The game was divided into multiple rounds, and in the last round the other two players tossed the ball only to each other, rejecting the participant. This delivered an ego-threat to the participant as they felt socially rejected by the other two players. Results revealed that in the ego-threat condition, participants with higher levels of Narcissism reacted more aggressively by blasting more severe levels of white noise to one of the other players who rejected them. The researchers hypothesized that this behaviour is because of the discrepancy between their grandiose self-image and the rejected, ego-threatened self. They also found that the more aware people who score highly on Narcissism were of this discrepancy, the greater their levels of aggression (Chester & DeWall, 2016). A similar study by Twenge and Campbell (2003) found that individuals who were high in Narcissism were more likely than those who were low in Narcissism to aggress towards someone who social rejected them, by administering louder and

longer blasts of white noise. Their findings also expand on Bushman and Baumeister's (1998) quintessential paper that shows that there is no evidence of aggression in those high on Narcissism when there is no ego-threat.

In their study Bushman and Baumeister (1998) had participants write a response to an essay prompt, and then randomly assigned them to receive either praise or negative feedback (the ego-threat). The feedback was prewritten and had nothing to do with the actual quality of the participant's work. It was found that individuals high in Narcissism aggressed the most in response to the ego-threat, reportedly because of their investment in their grandiose self-image. Meanwhile, participants with lower levels of Narcissism displayed lower levels of aggression in both the praise and ego-threat conditions. The relationship between Narcissism and aggressive responding was stronger in the ego-threat condition, though remained significant in the positive feedback condition as well (Bushman & Baumeister, 1998).

Similarly, Reidy, Foster and Zeichner (2010) sought to determine whether people who were high in Narcissism engaged in unprovoked aggression. They had participants play a reaction time task with another participant involving electric shocks. They found that participants higher on Narcissism aggressed against their opponent even before any provocation. This suggests that there may be an association between Narcissism and aggression in situations where there is anticipation of potential threats to the ego (Reidy et al., 2010).

As seen by the results of these studies, high Narcissism predicts aggressive responses in situations where the individual is insulted or perceives a threat to their positive self-image. However, negative effects of Narcissism can also occur in response to an ongoing interpersonal conflict.

Narcissism and Interpersonal Conflict Resolution

Previous research has found that individuals higher in Narcissism are more likely to aggress with or without provocation (Bushman & Baumeister, 1998; Reidy et al., 2010). Engaging in aggressive behaviour can have detrimental outcomes for interpersonal interactions, including interpersonal conflict and negativity among groups and individuals. Interpersonal conflict is defined as any scenario where one person or group prevents another person or group from achieving their goal (Barki & Hartwick, 2004).

An observational study by Peterson and DeHart (2014) explored the relationship between Narcissism and response to conflict with a romantic partner. It was found that participants who score high in Narcissism showed significantly more negative behaviour, such as criticizing and insulting their partner during the conflict. They also reported feeling less committed to their partner after the conflict. Similar to this study, Buam and Shnit (2003) showed that divorced fathers with high Narcissism used more attacking behaviours when managing conflict. The authors reasoned that this negative behaviour is a way for people who are high in Narcissism to defend themselves, and that aggressing toward the other person, they rid themselves of the ego-threat and transfer it onto the other individual (Baum & Shnit, 2003).

Despite the abundance of Narcissism research involving aggression and reaction to conflict, there are no studies to my knowledge that look at aggression levels of individuals who score highly on Narcissism during interpersonal conflict resolution after they have been exposed to an ego-threat. As mentioned previously, previous studies have extensively documented the link between high Narcissism and the short-term responses to conflict, in the present study I am interested in determining how these reactions affect subsequent attempts to resolve the conflict especially after an ego-threat.

Measuring Aggression

To study levels of aggression among participants, an opportunity to retaliate following an ego-threat (usually believed to be another participant in the study) is needed. For example, one common measure of retaliatory aggression is giving participants the opportunity to blast their ‘partner’ with white noise, with a more severe blast being indicative of a more aggressive response (Bushman & Baumeister, 1998; Chester & DeWall, 2016; Jones & Paulhus, 2010). Aggression and retaliation have also been measured through the use of electric shocks, with the severity of the shock indicating their level of aggression (e.g., Martinez, Zeichner, Reidy, & Miller, 2008). However, even though these may be adequate methods to operationalize aggression and retaliation, they do not accurately resemble real-life situations. In other words, if a narcissist experiences an ego-threat in real-life from another person, there is unlikely to be a way for them to send electric shocks or blasts of white noise to the cause of the ego-threat. Instead they would have to respond to the threat in a more readily available way.

The Present Study

For the present study, we looked at how students from the University of Western Ontario would react to an ego-threat by examining how aggressively they engaged in interpersonal conflict resolution. Participants were first given a mini writing assignment, and then randomly assigned to receive either positive or negative feedback (ego-threat) about their writing style. They were deceived to believe that this feedback comes from another participant. After reading this feedback, participants completed various questionnaires on Qualtrics including assessment of Narcissism, and a hypothetical conflict scenario involving the “co-participant” that had given them feedback. This conflict scenario was designed to allow for a more realistic assessment of aggression, as it outlined a classroom group work situation that this participant demographic

(undergraduate students) are likely to experience in real-life. Participants wrote a few sentences explaining how they would respond to the conflict situation with their co-participant, and these responses were coded by the researchers to assess levels of aggression. Use of forcing as a conflict resolution strategy, and the valence of the participant's impression of the co-participant were also assessed in the present study.

Based on previous research, I hypothesize that people who score high in Narcissism and experience the ego-threat are more likely to aggress in response to the hypothetical conflict scenario than people low in Narcissism (Bushman & Baumeister, 1998; Chester & DeWall, 2016). I also hypothesize that regardless of the level of Narcissism, when there is no ego-threat both groups will be unlikely to aggress in the hypothetical scenario (Bushman & Baumeister, 1998; Twenge & Campbell, 2003).

Method

Participants

Participants consisted of 54 undergraduate students (15 male, 39 female) from the University of Western Ontario, who ranged in age from 18 to 27 years ($M = 18.89$, $SD = 1.633$). Regarding ethnic composition, 41% of participants were Caucasian/White, 1% African/Black, 9% West Asian/Arabic, 15% South Asian (Indian/ Pakistani), 26% East/ Southeast Asian (Chinese/Filipino) 4% Latin American/Hispanic and 4% were mixed race. Overall, 74% of participants were in their first years of university, 17% in second year, 5% third years, and 4% in fourth year. Participants were recruited from the SONA Psychology Research Participation Pool or posters located in the university's Social Science building. When signing up, participants were led to believe the study is titled "Individual Differences and Social Interaction Study" so as not to reveal the true nature of the study.

Participants recruited through SONA were compensated with 1.0 course credits, as the study took about an hour to complete. Those recruited via poster were put into a draw to win one of three gift cards to Western's Hospitality Services, two valued at 10 CAD and one valued at 20 CAD. Participants were excluded if they participated in other versions of the study or if they succeeded in guessing the study's hypothesis in the deception check question (see "Materials" below). The study was approved by Western University's Research Ethics Board.

Materials

The present study is a subsection of a larger study, therefore only measures relevant for the present study are discussed.

Narcissism. was measured using the Narcissism Personality Inventory (NPI-40; Raskin & Terry, 1988). The NPI-40 is a 40-item forced-choice questionnaire that measures grandiose Narcissism. Participants are required to pick between two choices that which they most identify (e.g., "A. I am going to be a great person" And "B. I hope I am going to be successful"). The internal consistency of this scale across the test and retest have alphas of .80 and .82.

Conflict Resolution Scenario. To measure conflict resolution participants were given a hypothetical conflict scenario (Appendix A). The scenario was created specifically for this study and outlines a hypothetical scholarly conflict with the co-participant. Participants were asked to provide open-ended responses on how they would respond to this conflict scenario.

Manipulation Check. To determine whether participants in the experimental group responded to the deception appropriately, two open-ended manipulation check questions were included at the end of the survey. The first was "What is your impression of the co-participant (the other participant in this study)?" and the second being "What was your perception of the co-participant's feedback on your writing?".

Deception Check. To see whether or not participants understood the true nature of the study we asked them what they thought the purpose of the study was. This was administered in person during the experiment, before participants were debriefed.

Outcome Codes. Conflict Aggression: The presence of aggression was assessed by coding the responses to the conflict resolution scenario from 0 (*no aggression*) to 3 (*high levels of aggression*) These responses were coded by three researchers and meetings were held afterwards to reach a consensus on the codes (see Appendix B for examples of each).

Forcing as a conflict resolution strategy: The presence of forcing as a conflict resolution strategy was assessed by coding the responses to the conflict resolution scenario from 0 (*no forcing*) to 3 (*high levels of forcing*). These responses were coded by three researchers and meetings were held afterwards to reach a consensus on the codes (see Appendix B for criteria and examples of each).

Impression of the co-participant: The responses to the first manipulation check question, “What is your impression of the co-participant (the other participant in this study)?” were assessed for valence by coding from 0 to 3. The codes and their corresponding anchors were as follows: 0 (*no impression*), 1 (*positive impression*), 2 (*mix of both positive and negative impression*), and 3 (*negative impression*). These responses were coded by three researchers and meetings were held afterwards to reach a consensus on the codes (see Appendix B for criteria and examples of each).

Procedure

The present study (and the larger study of which it was a part of) was approved by Western University’s Research Ethics Board.

Participants arrived at the experimental laboratory, were greeted by the experimenter, who asked how they were recruited (making participants believe there is another participant coming recruited through a different method). Having participants believe they were interacting with another participant in the study was part of the deception throughout the study, whereas in reality the “other participant” was imagined. Participants were then brought to a room (henceforth known as the “participant room”) that was around the corner of the room the other participant was supposed to be in. They were then given time to read a letter of information and provide informed consent (the letter of information was different depending on whether they were recruited from SONA or poster). Participants were led to believe that the experimenter was “waiting for the other participant, who would be completing the study in a different room.” Leaving the participant room and closing the door behind them, the experimenter pretended to set another participant up by opening and closing a lab room around the corner (henceforth referred to as the 2nd lab room). After collecting the consent form from the participant, the experimenter asked the participant to wait for a few minutes while they collected the consent form of the other participant (using gender matched pronouns).

Returning to the participant room, the experimenter told the participants that the study was beginning and asked them to refrain from using their phone. The experimenter then re-emphasized the procedures of the study, telling the participant that they and the co-participant were randomly assigned to either a “student role” which involved writing a response to a mini-essay, or a “teacher role” which involved providing feedback on writing style. Participants were informed that they had been randomly assigned to the “student” role, while the co-participant had been assigned to the “teacher” role via a coin toss. Participants were then given the mini-essay prompt sheet (see Appendix C), with a piece of lined paper stapled to the back. Participants

were then shown their participant ID in the corner of the paper and told to remember it when filling out the online surveys. The experimenter then went over the instructions of the task, telling participants they had 10 minutes to complete the task, and that their progress would be checked after 5 minutes, making the participant believe the experimenter was checking on both participants at the same time.

When the experimenter returned at the end of the task, they collected the essay prompt and told the participant that their co-participant in the teacher role would have 5 minutes to read and provide feedback on their work, focusing on their sentence structure, flow, effectiveness of their arguments and the overall quality of their work. Participants were reminded to avoid going on their electronic devices at this time and instead offered a piece of paper they could doodle on.

The experimenter went into the 2nd lab room and rolled a dice to determine whether the participant would receive good (even numbers; feedback written in green; N=32) or bad feedback (odd numbers; feedback written in red; N=22). The feedback was written on the teacher evaluation sheets (see Appendix D and Appendix E). These feedback forms were pre-written by male and female researchers to ensure gender matching. The teacher evaluation sheet was then given a participant ID (the next number up from the participant) to keep up the deception, and placed in an envelope.

The participant then received the feedback form in an envelope and asked to look over it while the experimenter set up the next portion of the study to the other participant. After 2 minutes, the experimenter returned and asked the participant whether they had a chance to read the feedback. If the participant had comments on their feedback, they were told they will have an opportunity to discuss the feedback with their co-participant at the end of the study. The experimenter then turned on the lab computer and asked the participant to complete the

electronic portion of the study (which included demographic items, the hypothetical conflict scenario, and a series of questionnaires). The experimenter would check in on the participant approximately every 5 minutes, in order to keep up the ruse that they are checking on two different participants.

After they have completed the surveys (taking about 10 minutes), participants were verbally asked the deception question outlined in the Materials section, probing for suspicion about the true nature on the study and knowledge that the imagined co-participant did not exist. They were then debriefed on the true nature of the study and reassured that the writing feedback was pre-written and not reflective of their true writing quality.

Results

This experiment is part of a larger study and not all results were analyzed. For the current study, standardized estimates were used to conduct three ordinal logistic regressions, one for each outcome variables (aggression, forcing as a conflict resolution strategy and impression of the co-participant). Distributions for each of these outcomes in either the positive or negative condition can be seen in Figures 1, 2 and 3.

Descriptive Statistics

The scores on the NPI-40 ranged from 2-28 ($M=15.35$, $SD=7.05$), had a skewness of -0.17 and kurtosis -1.15, with internal consistency of $\alpha = .85$.

Ordinal Logistic Regressions

For the ordinal logistic regression, experimental group (0 = positive feedback condition, 1 = negative feedback condition), Narcissism, and interactions (experimental group X Narcissism) were agressed onto the ordinal variables; conflict aggression, forcing and impression of the imagined co-participant. The experimental group was found to be a significant predictor for all

three outcome variables. For every one unit increase on experimental group (getting the negative feedback), there is a predicted increase of 1.521 in the log odds of a participant being in a higher aggression category.

For every one unit increase on experimental group, there is also a predicted increase of 1.168 in the log odds of a participant being in a higher forcing category. Lastly, for every one unit increase on experimental group, there is a predicted increase of 1.780 in the log odds of a participant being in a higher impression category. In other words, getting more negative personal feedback is associated with an increased likelihood of using higher aggression levels (see Figure 1 for qualitative coding frequencies), greater likelihood of using forcing as a conflict resolution strategy (see Figure 2 for qualitative coding frequencies), and a greater likelihood of having a negative impression of the participant (see Figure 3 for qualitative coding frequencies).

Neither Narcissism nor the interaction between Narcissism and experimental group was a significant predictor of being in a higher category for any of the outcomes (see Table 1).

Discussion

The present study examined how writing performance feedback and Narcissism predicted conflict and impression of another person outcomes. The hypotheses that being assigned to an ego threat condition would lead to higher conflict aggression in more narcissistic individuals was not met. Narcissism also did not significantly predict conflict forcing or impression of co-participant in the present study. This is unlike previous studies, where participants with higher levels of Narcissism behaved more aggressively following an ego-threat (Bushman & Baumeister, 1998; Chester & DeWall, 2016). This may be because people are more likely to aggress only when they know their identity is anonymous, such as large groups (Zimbardo, 1969). Another possibility could be because participants were worried about their aggressive

responses being revealed to the co-participant, or that the experimenter would personally judge their response if it was too aggressive. In the present study, participants interacted one-on-one with the experimenter, and also signed their name on the consent form, which can signal that their identity and data would not be entirely anonymous to the experimenters. Another reason why there were low levels of aggression is the perception of the research assistant as an authority figure. Previous studies have found that the anticipated negative consequences combined with the presence of any authority figure inhibits aggressive responding (Rogers; 1980). While narcissism did not have an effect, the present study found that being assigned to receive negative feedback generally predicted more aggression in conflict (as well as forcing).

In addition, all participants who received negative feedback reported a significantly more negative impression of the co-participant. However, this was not influenced by Narcissism levels. This supports previous findings that an ego-threat leads to increased negative feelings (Stucke & Sporer, 2002).

Implications

Findings show that regardless of Narcissism levels, when ego is threatened, participants will engage in more aggressive and forcing behaviour and have a negative impression of the other individuals. Unlike Bushman and Baumeister's (1998) findings, which indicate that Narcissism may be independent of experimental group. In our study, Narcissism did not have an effect on any conditions. Our results suggest that regardless of narcissism levels, negative feedback relevant to the self (i.e. ego-threat) corresponds to negative interpersonal consequences. Negative feedback predicted conflict aggression and the use of forcing as a conflict resolution strategy, which are negative conflict behaviours.

Limitations and Future Directions

Narcissism alone or as an interaction with experiment group was not a significant predictor of being in a high aggressive, forcing or impression category. One possible reason for this occurrence is that Narcissism levels of the co-participants were overall low, as Raskin and Terry, the creators of the NPI-40 found that the average score is 15.55 (1988). For future versions of this study, to ensure we get participants with very high levels of Narcissism, we may look at people who are clinically diagnosed narcissists versus, in this current study, where we studied subclinical Narcissism.

The current study also had an easily resolvable conflict situation, with many participants being polite and not aggressing despite the unfair nature of the conflict. Future studies might use a more hostile conflict situation to assess if those high in Narcissism behave more aggressively in conflict following an ego-threat. Also using of a confederate posing as the co-participant may also reduce feelings of being singled out by the research assistant and provide increased feelings of anonymity. Using a confederate may also add to the deception, making participants further believe that there is a co-participant providing them feedback on their writing.

Conclusion

Overall, this study aimed to see whether differing levels of Narcissism led to increased negative responses following an ego-threat. However, contrary to our hypothesis, only the ego-threat itself was a significant predictor of aggression, forcing and negative impression of the co-participant. As this study is part of a larger study, running more participants and changing the research design for the future through use of a confederate and a more hostile conflict scenario should lead to more conclusive results.

References

- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual review of psychology*, 53.
- Barki, H., & Hartwick, J. (2004). Conceptualizing the construct of interpersonal conflict. *International journal of conflict management*, 15(3), 216-244.
- Baumeister, R. F., & Campbell, W. K. (1999). The intrinsic appeal of evil: Sadism, sensational thrills, and threatened egotism. *Personality and Social Psychology Review*, 3(3), 210-221.
- Baum, N., & Shnit, D. (2003). Divorced parents' conflict management styles: Self-differentiation and Narcissism. *Journal of Divorce & Remarriage*, 39(3-4), 37-58.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological bulletin*, 106(1), 59.
- Book, A., Visser, B. A., Blais, J., Hosker-Field, A., Methot-Jones, T., Gauthier, N. Y., ... & D'Agata, M. T. (2016). Unpacking more "evil": What is at the core of the dark tetrad?. *Personality and Individual Differences*, 90, 269-272.
- Bresnahan, M. J., Donohue, W. A., Shearman, S. M., & Guan, X. (2009). Research note: Two measures of conflict orientation. *Conflict Resolution Quarterly*, 26(3), 365-379.
- Breuer, J., & Elson, M. (2017). Frustration–Aggression Theory. *The Wiley handbook of violence and aggression*, 1-12.
- Buckels, E. E., Jones, D. N., & Paulhus, D. L. (2013). Behavioral confirmation of everyday sadism. *Psychological science*, 24(11), 2201-2209.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, Narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence?. *Journal of Personality and Social Psychology*, 75(1), 219.
- Buss, Arnold H., & Perry, Mark (1992). The Aggression Questionnaire. *Journal of Personality*

- and Social Psychology*, Vol 63(3), 452-459. doi: 10.1037/0022-3514.63.3.452
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavalley, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of personality and social psychology*, 70(1), 141.
- Campbell, W. K., Bonacci, A. M., & Shelton, J. (2004). Psychological entitlement: Interpersonal consequences and validation of a selfreport measure. *Journal of Personality Assessment*, 83, 29-45.
- Campbell, W. K., & Foster, C. A. (2002). Narcissism and commitment in romantic relationships: An investment model analysis. *Personality and social psychology bulletin*, 28(4), 484-495.
- Chester, D. S., & DeWall, C. N. (2016). Sound the alarm: The effect of Narcissism on retaliatory aggression is moderated by dACC reactivity to rejection. *Journal of Personality*, 84(3), 361-368.
- De Dreu, C. K., Evers, A., Beersma, B., Kluwer, E. S., & Nauta, A. (2001). A theory-based measure of conflict management strategies in the workplace. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 22(6), 645-668.
- Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., & Sears, R. R. (1939). Frustration and aggression.
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The Dark Triad of personality: A 10 year review. *Social and Personality Psychology Compass*, 7(3), 199-216.
- Geis, F. L., & Moon, T. H. (1981). Machiavellianism and deception. *Journal of personality and social psychology*, 41(4), 766.

- Gilbert, M. A., & Bushman, B. J. (2017). Frustration-aggression hypothesis. *Encyclopedia of Personality and Individual Differences*, 1-3.
- Jakobwitz, S., & Egan, V. (2006). The dark triad and normal personality traits. *Personality and Individual Differences*, 40(2), 331-339.
- Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: A concise measure of the dark triad. *Psychological assessment*, 22(2), 420.
- Jones, Daniel N., & Paulhus, Delroy L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment*, Vol 21(1), 28-41. doi: <https://dx.doi.org/10.1177/1073191113514105>. © 2014 by SAGE Publications. Reproduced by Permission of SAGE Publications.
- Jones, D. N., & Paulhus, D. L. (2010). Different Provocations Trigger Aggression in Narcissists and Psychopaths. *Social Psychological and Personality Science*, 1(1), 12–18.
- Leary, M. R., Terry, M. L., Batts Allen, A., & Tate, E. B. (2009). The concept of ego threat in social and personality psychology: Is ego threat a viable scientific construct?. *Personality and Social Psychology Review*, 13(3), 151-164.
- LeBreton, J. M., Binning, J. F., & Adorno, A. J. (2006). Subclinical psychopaths. *Comprehensive handbook of personality and psychopathology*, 1, 388-411.
- Martinez, M. A., Zeichner, A., Reidy, D. E., & Miller, J. D. (2008). Narcissism and displaced aggression: Effects of positive, negative, and delayed feedback. *Personality and Individual Differences*, 44(1), 140-149.
- Međedović, J., & Petrović, B. (2015). The dark tetrad. *Journal of Individual Differences*.
- Panek, E. T., Nardis, Y., & Konrath, S. (2013). Mirror or Megaphone?: How relationships between Narcissism and social networking site use differ on Facebook and

- Twitter. *Computers in Human Behavior*, 29(5), 2004-2012.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of research in personality*, 36(6), 556-563.
- Peterson, J. L., & DeHart, T. (2014). In defense of self-love: An observational study on narcissists' negative behavior during romantic relationship conflict. *Self and Identity*, 13(4), 477-490.
- Plouffe, R. A., Saklofske, D. H., & Smith, M. M. (2017). The assessment of sadistic personality: Preliminary psychometric evidence for a new measure. *Personality and individual differences*, 104, 166-171.
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45(2), 590.
- Raskin, R., Novacek, J., & Hogan, R. (1991). Narcissistic self-esteem management. *Journal of Personality and Social Psychology*, 60(6), 911.
- Raskin, R., & Terry, H. (1988). Narcissistic Personality Inventory-40 (NPI-40). A *Principal-Components Analysis of the Narcissistic Personality Inventory and Further Evidence of Its Construct Validity*, 54.
- Reidy, D. E., Foster, J. D., & Zeichner, A. (2010). Narcissism and unprovoked aggression. *Aggressive Behavior*, 36(6), 414-422.
- Robins, R. W., John, O. P., Hogan, R., Johnson, J., & Briggs, S. (1997). The quest for self-insight: Theory and research on accuracy and bias in self-perception. In *Handbook of Personality Psychology* (pp. 649-679). Academic Press.
- Rogers, R. W. (1980). Expressions of aggression: Aggression-inhibiting effects of anonymity to authority and threatened retaliation. *Personality and Social Psychology Bulletin*, 6(2),

315-320.

Schnieders, T.C., & Gore, J.S. (2011). We don't want your kind here: When people high in Narcissism show prejudice against immigrants.

Stöber, J. (2001). The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. *European Journal of Psychological Assessment, 17*(3), 222.

Stucke, T. S., & Sporer, S. L. (2002). When a grandiose self-image is threatened: Narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *Journal of Personality, 70*(4), 509-532.

Twenge, J. M., & Campbell, W. K. (2003). "Isn't it fun to get the respect that we're going to deserve?" Narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin, 29*(2), 261-272.

Wong, C., & Law, K. S. (2002). *Wong and law emotional intelligence scale* doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1037/t07398-000>

Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. In *Nebraska symposium on motivation*. University of Nebraska press.

Appendix A

Conflict Resolution Scenario – Experimental Condition

Imagine you and your co-participant (the other participant in this research study) are in the same university class and are assigned to work together as partners on a group project in that class. The project is worth 40% of your grade. The group project requires you to respond to a list of questions on a topic your professor assigned. Partners will each get the same grade on the project. You and your co-participant sit down to discuss how to split up work for the group project. Your co-participant tries to assign you all the difficult project questions and take all the easy questions for themselves, which you find very unfair.

What would you say or do in response? How would you respond to this conflict? (please write your answer in the space provided below)

Appendix B

***Not all examples are the full response**

Outcome Variable: Aggression

0 = None

Ex. "By having an equal discussion the workload will be split up evenly and each partner is seen as an equal."

1 = Low

Ex. "I would not allow this to happen and discuss a way for the work to be split up in a fair way"

2 = Medium

Ex. "I would address the issue with an affirmative tone. so to communicate that they are being on fair. I would continue by splitting the work up fairly and making my best attempt to have them agree with my choice. If they do not agree, I will inform my partner that I will be speaking to the professor regarding this matter, in hopes to have them agree."

3 = High

Ex. "I would tell them to go stuff themselves somewhere and be fair. This partner is very inconsiderate and needs to work on their collaboration skills. Clearly, this person has no idea how to work in a team and needs to work on that."

Outcome Variable: Forcing as a conflict resolution Strategy

0 = None: Giving in to conflict partner's wishes

Ex. "I would take the most difficult project questions myself, and almost be glad that it was suggested by the other person"

1 = Low: Working to find a compromise or cooperative solution that meets the needs of both

Ex. "I would suggest that we divide it up evenly and if she feels uncomfortable answering the harder questions we could do them together, and then do the easier ones separately."

2 = Medium: Pushing to get one's own concerns addressed and needs met

Ex. "I would first ask them to divide up the work more fairly as I feel it was not evenly split. If they were to not comply, I would bring this to a higher up like my professor or TA to get some help on how to fix this conflict."

3 = High: Only focused on own concerns, refusing to listen to conflict partner and address conflict partner's needs

Ex. "I would tell him the consequences of me getting assigned all the difficult project questions and guilt-trip them into thinking they will more likely get a lower grade on the assignment, if I do all the work."

Outcome Variable: Impression of the co-participant

0 = no impression/neutral impression/undecided

Ex. "I don't have any impression of them, I have not met them"

1 = positive impression

Ex. "They were very nice because they left me a nice comment on my writing."

2 = both positive and negative impression

Ex. "My impression of the co-participant is that they are direct, confrontational, and specific."

3 = negative impression

Ex. "My first impression of her is that she is not friendly or nice"

Appendix C

Participant ID _____

Student Role: Mini Essay Prompt Form

For this experiment, we want to get an idea of the literacy levels of undergraduate university students.

Please respond to the prompt below by stating whether you agree or disagree with the prompt and write a few short paragraphs arguing your point. Afterwards, you will be evaluated by your co-participant in the study.

Social media (e.g., Facebook, Instagram, Snapchat, Twitter, etc.) is good for social relationships.

You have 10 minutes to write a response.

Appendix D

Participant ID: _____

Teacher Role: Writing Feedback Form

For this experiment we want to get an idea of the literacy levels of undergraduate university students.

Your job is to evaluate the writing style of a fellow Western University undergraduate student, who is your co-participant in this study.

When you are grading the writing, please consider the following factors: flow, sentence structure, and effectiveness of their arguments.

Grade out of 10:

Please write some comments below:

Appendix E

Good Essay Feedback

Your sentences flow very well, and your ideas are clear and understandable. Can't think of anything I would change in your essay.

You are a good writer.

10/10

Bad Essay Feedback

Your sentences don't flow very well, and your ideas are not very clear or understandable. I think changes need to be made to your essay.

You need some improvement as a writer.

3/10

Figure 1

Quantitative Coding Frequencies for Aggression as the Outcome Variable

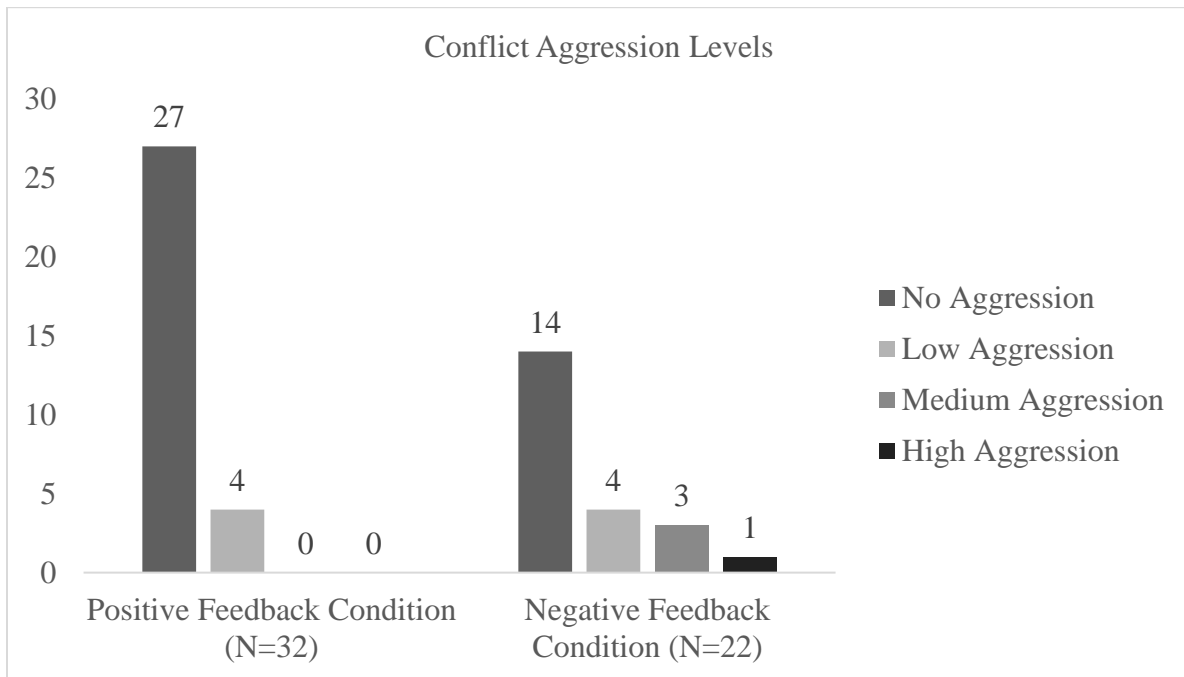


Figure 2

Quantitative Coding Frequencies for Forcing as the Outcome Variables

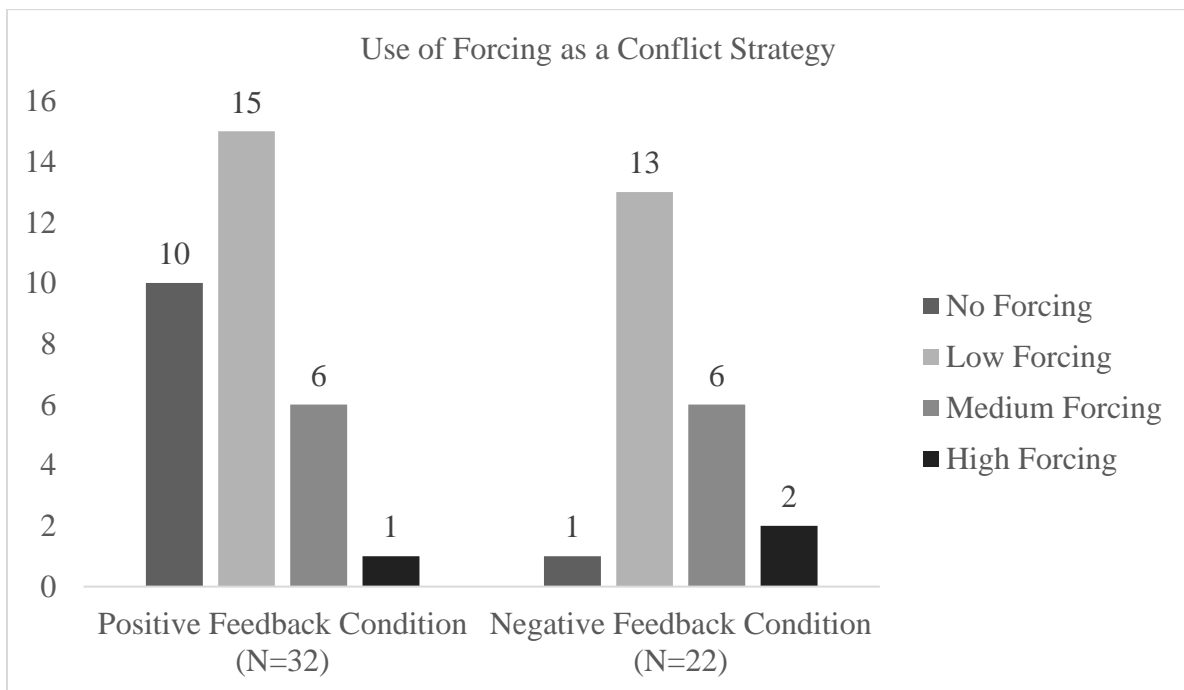


Figure 3

Quantitative Coding Frequencies for Impression of the co-participant as the Outcome Variable

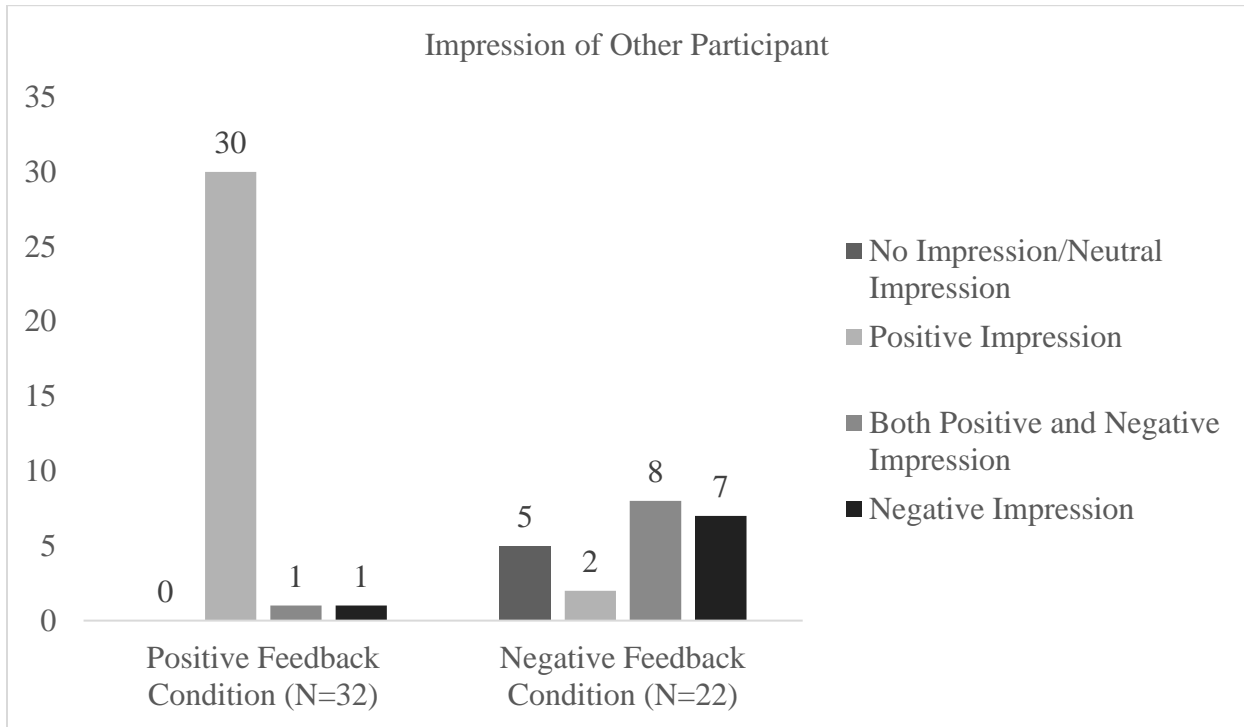


Table 1*Ordinal Logistic Regressions*

		<u>Model Estimates</u>		
	Predictor	B	SE	P
Outcome 1 Aggression	Experimental Group	1.521	.703	p < .05
	Narcissism	-.029	.075	.699
	Experimental Group x Narcissism	.081	.101	.422
Outcome 2 Forcing	Experimental Group	1.168	.554	p < .05
	Narcissism	.012	.047	.802
	Experimental Group x Narcissism	.066	.078	.395
Outcome 3 Impression	Experimental Group	1.780	.605	p < .01
	Narcissism	.048	.053	.372
	Experimental Group x Narcissism	.099	.084	.238

Note. Ordinal Logistic regressions for three outcome variables; aggression, forcing as a conflict resolution strategy and impression of the co-participant