The Role of Outgroup-Directed Gratitude on Prejudice Toward the Outgroup in an Intergroup Context: The Mediating Role of Outgroup Empathy

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Abstract

Conflict between groups is prevalent in everyday life. It can have negative effects on the well-being of individuals. Reduced prejudice and less negative views toward an outgroup can help alleviate the conflict between groups. This paper examines the effect of outgroup-directed gratitude on outgroup prejudice and the mediating role of outgroup empathy within this relationship. First-year psychology students in Groningen (N = 111) participated in an experiment about their opinions toward students who are members of Vindicat (the outgroup). They were randomly assigned to either an outgroup-directed gratitude condition or a general gratitude condition. The results fail to find a relationship between outgroup-directed gratitude and outgroup prejudice. Furthermore, outgroup-directed gratitude did not lead to increased empathy toward the outgroup. Outgroup empathy failed to mediate the relationship between outgroup-directed gratitude and outgroup-directed gratitude and suggestions for further research are discussed.

Keywords: Outgroup-directed gratitude, outgroup empathy, prejudice, negative attitudes

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Conflict between social groups has consequences that often negatively affect the well-being of individuals and nations (Fahoum et al., 2022). This could range from well-known challenging conflicts, such as the Israeli-Palestinian conflict (Bar-Tal, 1998) to smaller ones, such as conflicts between different groups of students (See & Wade, 2022). Social identity theory states that the group people identify with is called the 'ingroup', while the group people do not identify with is called the 'outgroup' (Tajfel & Turner, 1979). People often are biased in favour of their ingroup, leading to discrimination toward the outgroup and intergroup conflict (Brewer, 2007; Jackson, 2002; Oeberst et al., 2020; Tajfel & Turner, 1979). It is therefore important to find factors that can alleviate this intergroup conflict.

One factor that has been shown to regulate intergroup conflict is emotions (Bar-Tal & Salomon, 2006). One emotion that could help with conflict resolution is gratitude since it is associated with different positive outcomes, such as positive emotions, health benefits, and helping behaviour (Algoe, 2012; Bartlett, 2006; McCullough et al., 2001). However, most research has focused on how feeling grateful can impact social relationships in interpersonal or relational settings, and very little research has focused on the social psychological implications of gratitude in intergroup relations contexts. Therefore, in this research, we will investigate whether gratitude toward the outgroup can decrease prejudice toward that outgroup, and the mediating role of outgroup empathy in the relationship between outgroup-directed gratitude and prejudice toward the outgroup.

Gratitude in an Intergroup Relations Context

Gratitude can be conceptualized as a positive moral emotion that arises when one is the beneficiary of another person's actions that are considered valuable (McCullough et al., 2001). It can promote social behaviour directed toward the benefactor (Bartlett et al. 2006). It

can also serve a social and moral function by strengthening personal bonds and promoting positive social relationships (e.g., a decrease in aggressive behaviours towards others; Algoe, 2012; DeWall et al., 2011). This leaves people with a greater feeling of confidence in their social relationships (Gino & Sweitzer, 2008). This indicates that, as an emotion, gratitude can bring people closer together.

Most of the research on gratitude is investigated in an interpersonal context. The benefits of gratitude could extend to an intergroup context. Positive emotions can have a conciliatory influence on intergroup conflict (Halperin et al., 2013), for example, hope is associated with accepting peace-making opportunities (Cohen-Chen et al., 2014). Moreover, when an outgroup reacts positively toward an ingroup, these positive attitudes and behaviours are reciprocated (Doosje & Haslam, 2005). Gratitude may work similarly to other positive emotions (Fredekson, 2004). Therefore, gratitude may help reduce intergroup conflict. Additionally, gratitude can be directed toward an entire outgroup (Rambaud et al. 2021). Individuals do internally attribute positive behaviour toward an outgroup target when they are grateful, even when that behaviour is counter-stereotypical (Jackson et al. 2001). Thus an ingroup member, being helped by an outgroup member, could help foster positive emotions, like gratitude, toward that outgroup member (Collange & Guegan, 2020). In this way, gratitude can help foster a positive view toward an outgroup along with alleviating conflict.

Outgroup-directed Gratitude and Outgroup Prejudice

In this research, we focus on how outgroup-directed gratitude may help reduce outgroup prejudice. From an interpersonal perspective, prejudice can be referred to as feeling, favourable or unfavourable, towards another person, without it being based on actual experience (Allport, 1954). From an intergroup perspective, however, prejudice is referred to as negative attitudes toward specific outgroups (Brewer, 1999). Previous research suggests how gratitude and other expressions of appreciation can help maintain relationships between

groups and even increase them (Jonas and Mummendy, 2008). Gratitude can therefore help decrease these negative attitudes toward other groups.

Negative emotions, such as fear, hate, and contempt, directed toward the outgroup have been found to escalate conflict and serve as a barrier to conflict resolution (Lerner et al., 2003; Halperin, 2011). Acting upon these feelings and discriminating against the outgroup is a result of ingroup bias (Brewer, 2007). Feeling grateful in general, therefore, might not be enough to reduce prejudice toward the outgroup due to people favouring the ingroup over the outgroup. An earlier study found that when people believe an outgroup has treated the ingroup fairly, the ingroup bias is reduced (Diehl, 1989). Additionally, that belief in fair treatment invites reciprocity from the ingroup toward the outgroup (Doosje & Haslam, 2005). We suggest, therefore, that gratitude can only reduce prejudice when it is directed toward the outgroup.

This research will expand on research conducted by Rambaud et al. (2021). They showed that positive interdependence is associated with higher group-based gratitude, which in turn was associated with reduced prejudicial attitudes and behavioural intentions toward immigrants. Positive interdependence refers to when one individual or group's actions are influenced by how another group or individual acts (DeDreu et al., 2020). In a second study they showed that by highlighting outgroup contributions, gratitude toward the outgroup increased which in turn was associated with reduced prejudice, increased warmth, and reciprocity toward the outgroup compared to a control condition. They discovered that gratitude not only helps foster positive emotions toward the outgroup (Doosje and Haslam, 2005) but also helps reduce negative attitudes. This paper will try to conceptually replicate the relationship between outgroup-directed gratitude and outgroup prejudice and builds on the research performed by Rambaud et al. (2021) by investigating whether there is a causal relationship between outgroup-directed gratitude and outgroup prejudice and investigating the

mediating role of empathy in that relationship.

Since gratitude is defined as being the beneficiary of another person's valued actions (McCullough et al., 2001), we argue that when a group is grateful toward another group, positive interdependence could occur. Positive interdependence is associated with a more positive group stereotype, which in turn could increase helping behaviour (Cuddy et al., 2007, Fiske et al., 1999). Moreover, it also helps weaken intergroup bias (Dechamps & Brown, 1983). Additionally, research suggests that aggressive attitudes toward an outgroup may be changed following interventions aimed at regulating emotions (e.g. gratitude) targeted toward the outgroup (Halperin et al., 2013). We, therefore, suggest that outgroup-directed gratitude may reduce outgroup prejudice.

The Mediating Role of Outgroup-directed Empathy

We propose that outgroup empathy may mediate the relationship between outgroup-directed gratitude and outgroup prejudice. Empathy is defined as a naturally occurring subjective experience of similarity between the feelings of oneself and another person without losing track of whom the feelings belong to (Decety and Jackson, 2004). Moreover, group empathy is defined as feeling empathy for a person based on group membership (Vanmann, 2016). People tend to have more empathy toward ingroup members than outgroup members (Tarrant et al., 2009). This is in line with the social identity theory of Tajfel and Tuner (1979) which explains that people are biased towards their ingroup. People tend to show less empathy toward outgroup members because they tend to dehumanize them (Buckels and Trapnell, 2013). In a conflict situation, however, expressing empathy toward an outgroup is an important step toward reconciliation (Čehajić-Clancy et al., 2016). The Empathy-Attitudes-Action model of Batson et al. (2002) states that empathy toward the outgroup can promote positive attitudes and in turn, encourage positive action toward the outgroup.

There is little research done on outgroup-directed gratitude predicting group-based

empathy. The relationship between gratitude and empathy has not been tested in an intergroup setting. There is, however, research that suggests gratitude and empathy are positively related by recognizing the benevolent actions performed by another person (Worthen & Isakson, 2007). This connection between the factors can be extended to an intergroup context. Empathy alone, however, is not enough to reduce prejudice toward the outgroup. Empathy directed only toward the ingroup can help sustain the status quo and discriminate against the outgroup (Carlo et al., 2022). We suggest that feelings of gratitude toward an outgroup could help ingroup members understand the outgroup's emotional states and perspectives (i.e., empathy; Decety & Jackson, 2004; Kim et al., 2018). This understanding can be defined as empathy directed toward the outgroup. This fits with the idea that gratitude fosters different forms of prosociality by inducing empathy and improving attitudes toward others (e.g., see Algoe, 2012; McCullough et al., 2001). Additionally, feelings of gratitude developed from an ingroup member being helped by an outgroup member helps the ingroup member foster more positive attitudes toward the outgroup (Collange & Guegan, 2020). To appreciate the efforts of the benefactor, empathy is necessary since gratitude is an empathic emotion (Lazarus and Lazarus, 1994). We propose, therefore, that increased feelings of outgroup-directed gratitude increase feelings of outgroup empathy.

Empathy may be effective in reducing social prejudice and intergroup conflict (Stephen and Finlay, 1999). This is in accordance with the research of Gordon et al. (2004) that states that a perspective change can help reduce negative views toward an outgroup. Empathy can also foster positive attitudes and behaviours that improve intergroup relations (Aboud et al., 2012). Increased valuing of one individual outgroup member may generalize to the collective out-group to promote more positive attitudes overall (Batson et al., 1997). Therefore, we propose that increased feelings of empathy lead to less prejudice of the

outgroup. This paper proposes that outgroup empathy is a mediator in the relationship between outgroup gratitude and prejudice directed toward the outgroup.

Hypotheses

In this research, we investigated whether and how outgroup-directed gratitude may lead to decreased prejudice toward outgroup members. We hypothesized that outgroup-directed gratitude would predict decreased prejudice by the ingroup toward an outgroup (relative to general gratitude). We also proposed that outgroup-directed gratitude would lead to higher outgroup-directed empathy (compared to general gratitude). Moreover, this paper investigated whether outgroup-directed empathy would mediate this relationship. That is, outgroup-directed gratitude would elicit increased empathy toward the outgroup which in turn would lead to decreased prejudice toward them (in comparison with general gratitude).

We used the intergroup context of student associations in Groningen. We used student associations since it is a context the psychology students we investigated are already familiar with. The outgroup we used is students who are members of the student society Vindicat. This outgroup was used since earlier research suggests that students already hold negative attitudes toward students who are members of Vindicat (Leal et al., 2022).

Method

Participants and Design

In total, the experiment was completed by 129 participants from the University of Groningen via a SONA platform (i.e., first-year psychology students). The SONA system is used for first-year psychology students, who are required to collect a certain number of SONA credits to fulfil study requirements. Seven participants were excluded because they were members of Vindicat, and 11 participants were excluded because they had never heard of Vindicat. After the exclusion criteria, the final sample consisted of 111 participants. 73.9% of

the participants were female and 23.4% of the participants were male. The mean age of the students was 18.7 with a standard deviation of 2.46. The ages of the participants ranged between 17 and 33. Of the students, 61.3% followed the Dutch track, while 37.8% of the participants followed the international track. Participants were rewarded 0.4 SONA credits. Participants were randomly assigned to one of the two conditions: outgroup gratitude and gratitude.

Procedure

The Ethics Committee of the Faculty of Behavioural and Social Sciences of the University of Groningen approved the study before it was activated online. The study was designed using Qualtrics (www.qualtrics.com). After giving their informed consent, participants were asked to give their permission to collect their data in accordance with GDPR (General Data Collection Regulation) guidelines.

The participants were told that researchers were interested in their opinions about different student societies. The participants were asked about three different student societies in Groningen: Vindicat, Albertus, and Cleopatra. They were asked if they know the student societies, whether they are a part of the student societies, and how warm they felt towards the student societies. Afterward, the students were put into either the outgroup gratitude condition or the general gratitude condition. In the outgroup gratitude condition participants read about positive activities Vindicat has organized for other students, while in the general gratitude condition participants read about positive activities students in general have organized for other students. Following the story, the students completed a measure of emotions.

Next, the participants were told that they were randomly assigned a student society to answer questions about, however, all participants were assigned to answer questions about Vindicat. They completed measures about empathy toward students who are a part of Vindicat and their attitude toward students who are a part of Vindicat. Lastly, participants were asked

some demographical questions. They were asked about their gender, age, and whether they participated in the Dutch or International track of the psychology course. Afterward, they were thanked and debriefed.

Measures

General Attitude Toward Vindicat

To measure general attitude toward Vindicat, participants indicated how warm they felt about them on a scale from 0 to 100 (M=19.9, SD=18.6; Converse and Presser, 1986). The participants on average felt very low levels of warmth towards students who are members of Vindicat.

Manipulation Check

To measure their gratitude, participants were asked about how much they felt grateful, thankful, and appreciative. The Cronbach's alpha for these three emotions was $\alpha=0.92$. Additionally, embarrassment, disgust, happiness, enthusiasm, guilt, anger, outrage, shame, and sadness were measured to balance the positive and negative emotions. The three items were correlated with happiness and enthusiasm with a Pearson correlation of 0.80. They indicated how they felt on a 7-point Likert scale ranging from 1 (not at all) to 7 (very much). The Cronbach's alpha of the total emotion measure was $\alpha=0.91$. The Cronbach's alpha of the negative emotions was $\alpha=0.85$.

Outgroup Empathy

Participants were asked how much empathy toward students who are a member of Vindicat they felt with a seven-item scale (Hasson et al., 2018). Participants indicated how much they agreed with: "I feel empathy toward students who are members of Vindicat.", "I feel sympathy toward students who are members of Vindicat.", "I feel compassion toward students who are members of Vindicat.", "I feel connected to students who are members of Vindicat.", "I feel a

bond with students who are members of Vindicat.", "I feel similar to students who are members of Vindicat.". All statements were measured with a 7-point Likert scale ranging from 1 (not at all) to 7 (very much). The Cronbach's alpha of this scale was $\alpha = 0.91$.

Outgroup Prejudice

For the prejudice measure a proxy of negative attitudes was used. The participants indicated on a 7-point Likert scale ranging from 1 (not at all) to 7 (very much) how much they agreed with statements about the morality, sociability, and competence (Leach et al., 2007) of students who are members of Vindicat. For the morality scale, it was measured how much participants agreed that students who are members of Vindicat are "Sincere", "Trustworthy", and "Honest", for the sociability scale how much they were; "Likeable", "Friendly", and "Warm", and for the competence scale how much the students were; "Intelligent", "Competent", and "Skilled". The Cronbach's alpha of the entire scale is 0.94, the alpha of the morality subscale is 0.89, the alpha of the sociability subscale is 0.88, and the alpha of the competence subscale is 0.91.

Results

Preliminary Analysis

The descriptive statistics are displayed in Table 1, and correlations are shown in Table 2. Outgroup-directed Gratitude was significantly correlated with outgroup prejudice (r = 0.29), and outgroup empathy (r = 0.30). Outgroup empathy was also significantly correlated with outgroup prejudice (r = 0.65).

Table 1

Descriptive Statistics per Condition

	Outgroup Gratitude	Gratitude condition
	condition (N=56)	(N=55)
Variable	Mean (SD)	Mean (SD)
Self-reported		
Gratitude	3.35(1.62)	4.30(1.60)
Empathy	1.92(0.81)	1.99(0.91)
Prejudice	3.25(1.25)	3.27(1.22)
Morality	2.99(1.17)	2.85(1.28)
Sociability	2.98(1.23)	2.99(1.40)
Competence	3.79(1.34)	3.96(1.42)

Note. N = 111.

 Table 2

 Correlations between study variables

Variable	Self-reported	Empathy	Prejudice
	Gratitude		
Self-Reported	1		
Gratitude			
Outgroup Empathy	0.30**	1	
Outgroup Prejudice	0.29**	0.65**	1

Note. ** Correlations are significant with a p-value lower than 0.01 level (2-tailed), N = 111.

Manipulation Checks

We conducted a t-test to check whether the manipulation was successful. Unexpectedly, people felt more grateful in the general gratitude condition (M=4.30, SD=1.60) than in the outgroup gratitude condition (M=3.35, SD=1.62), t(109)=-3.13, p=0.02, Cohen's d=0.95, 95% CI [-1.57, -.035]. However, people still experienced great gratitude that was significantly different from the midpoint 3, (M=3.82, SD=1.68, t(109)=5.15, p<0.001, 95% CI [0,50, 1.14]). Therefore, even though participants experienced great gratitude across conditions, there were still differences across conditions, which was not intended. We also tested whether positive and negative emotions differed in conditions. Positive emotions were significantly higher (M=4.2, SD=1.50) in the general gratitude condition than in the outgroup gratitude condition (M=3.34, SD=1.56), F(109)=8.72, p=0.004, Cohen's d=0.56. There was no significant difference for the negative emotions per condition, F(109)=0.42, p=0.51, Cohen's d=0.12.

Main Analyses

A t-test was performed to test whether outgroup gratitude significantly predicted prejudice toward the outgroup. We found no significant main effect of outgroup gratitude on outgroup prejudice, t(109) = -0.605, p = 0.95, Cohen's d = 0.02, 95% CI [-0.46,0.43]. Particularly, outgroup prejudice was not significantly lower in the outgroup gratitude condition (M = 3.25, SD = 1.25) than in the general gratitude condition (M = 3.27, SD = 1.22). In conclusion, the main hypothesis was not supported. We exploratorily tested whether outgroup gratitude predicted each of the three components of outgroup prejudice (i.e., morality, sociability, and competence). There were no significant effects of condition on morality t(109) = 0.57, p = 0.57, Cohen's d = 0.11, 95% CI [-0.33, 0.60], sociability t(109) = -0.23, p = 0.98, Cohen's d = 0.01, 95% CI [-0.50, 0.49] as well as for competence t(109) = -0.66, p = 0.51, Cohen's d = 0.12, 95% CI [0.69, 0.34].

Secondly, we tested whether outgroup-directed gratitude predicted empathy toward the outgroup. Another test-test showed that participants did not report greater empathy toward the outgroup in the outgroup gratitude condition (M = 1.92, SD = 0.82) than in the general gratitude condition (M = 0.99, SD = 0.91), t(109) = -0.42, p = 0.68, Cohen's d = 0.08, 95% CI [-0.39, 0.25]. The second hypothesis was also not supported. Since we found no significant effects of outgroup gratitude on outgroup empathy and prejudice, we did not test indirect effects.

Discussion

In the current study, we examined the role of outgroup-directed gratitude in an intergroup context. Specifically how the impact of outgroup-directed gratitude on outgroup empathy and outgroup prejudice. We hypothesized that outgroup-directed gratitude would predict decreased prejudice by the ingroup toward an outgroup (relative to general gratitude). We also proposed that outgroup-directed gratitude would lead to higher outgroup-directed empathy (compared to general gratitude). Moreover, this paper investigated whether outgroup-directed empathy would mediate this relationship. That is, outgroup-directed gratitude would elicit increased empathy toward the outgroup which in turn would lead to decreased prejudice toward them (in comparison with general gratitude). All three of the hypotheses were not supported. This indicates that outgroup-directed gratitude did not lead to reduced outgroup prejudice and increased empathy toward the outgroup.

Theoretical Implications

This paper contributes to the literature by shedding light on the impact of gratitude on reducing prejudice in intergroup relations. Unexpectedly outgroup-directed gratitude did not lead to less prejudice toward the outgroup in our study. We did not find support that gratitude decreases negative attitudes toward an outgroup. This contradicts previous research that investigated the effect of outgroup-directed gratitude on negative attitudes toward an outgroup

(Rambaud et al., 2023). Moreover, we did not find support for the idea that positive emotions (e.g. gratitude) improve intergroup relations (Halperin et al., 2013; Collange & Guegan, 2020). It is therefore important to investigate why the results differed in this study compared to previous research performed by Rambaud et al. (2021). One possible explanation could be that there already exist strong tensions between groups, which may leave less room to reduce prejudice. On a scale of 0 to 100, the participants had a mean of 19.9 on how warm they felt toward Vindicat (SD = 18.6). Moreover, some of the benefits of gratitude can be time-limited or situation-bound (Worthen & Isakson, 2007). Beneficiaries could be suspicious of the motivations of the benefactor when they bestow gifts and favours (Morgan, 2021). This will lead to people feeling mixed feelings about the gratitude experienced depending on how the recipient cognitively appraises the benefactor's intent (Gulliford, 2019). This is in accordance with multiple studies that have shown that perception of intent is important when feeling gratitude (Wood et al., 2008; Gulliford & Morgan, 2016; Morgan et al., 2017). Therefore, if the participants were suspicious about the intentions of the benefactor, besides feeling grateful, they could also have felt doubts about the authenticity of the outgroup's actions. Further research is needed on the effects of gratitude in an intergroup conflict context.

Secondly, there was also no support that outgroup-directed gratitude increased empathy toward the outgroup. This suggests the idea that feelings of gratitude towards an outgroup can help members of an ingroup understand the emotional states and perspectives of an outgroup was not supported (Decety and Jackson, 2004). Besides the suspicions the participants could have had if they doubted the motivations of the outgroup, feelings of gratitude can create a feeling of indebtedness and thus lead to mixed feelings toward the outgroup (Watkins et al., 2006, Morgan et al., 2014). These mixed feelings and suspicions might have prevented the participants from understanding the emotional state and perspectives of the outgroup, thus outgroup-directed gratitude failed to induce empathy.

Future research should discover the perceived motivations of the outgroup.

Moreover, further research is needed to investigate whether an existing intergroup conflict has an effect on the relationship between outgroup-directed gratitude and empathy.

Due to the lacking connection between outgroup-directed gratitude and outgroup empathy, the third hypothesis that empathy mediates the relationship between outgroup-directed gratitude and prejudice towards the outgroup is also not supported.

Limitations and Future Research

One limitation of this study is the external validity of the context. Since we examined students in the city of Groningen, we used a context with which the students are familiar. It is unclear whether these results can be generalized to other contexts, such as other countries, cultures, or age groups. As mentioned before, in the context of the student societies in the city, students already have a negative opinion toward students who are a member of Vindicat (Leal et al., 2022). The association between outgroup-directed gratitude and outgroup prejudice was found in an immigrant context in France (Rambaud et al., 2021). While both contexts include intergroup conflict, it is unknown what the general attitude of the French toward the immigrants was. Future research should therefore discover whether there is a relationship between outgroup-directed gratitude and outgroup prejudice in contexts where the attitude toward the outgroup is potentially less negative at the start of the research.

Secondly, the sample size of the study is rather small. The study has only 111 participants, and while the study is not underpowered, a larger sample would have been better. A larger sample has lower margins of error and standard deviations and is thus more reliable. Moreover, the results will be more precise. Future research should replicate these results with a larger sample size.

Thirdly, the manipulation of the study could have been stronger. Students did feel significantly grateful from the midpoint, however, there was an unexpected difference in the

conditions. Participants felt more grateful in the general gratitude condition than in the outgroup-directed gratitude condition. In a future study, there should not be a difference in the gratitude levels between the two conditions.

Lastly, the general gratitude condition could be seen as an ingroup gratitude condition and not a control condition. This is because, in the general gratitude condition, the participants read about other students. The participants were students as well, thus the students could be perceived as part of the ingroup. Due to this being the case, the relationship between outgroup-directed gratitude on outgroup prejudice can be compared to ingroup gratitude, however, it is advised to be cautious about inferring conclusions compared to general gratitude. A third condition should be added in which students feel neither grateful toward the outgroup nor the ingroup in further research.

Future research should continue to expand on the role of outgroup-directed gratitude in lowering outgroup prejudice. Especially since the results of this study are not in line with prior research it would be interesting to discover the context that allows outgroup-directed gratitude to increase outgroup empathy and decrease outgroup prejudice. Further research should focus on intergroup contexts that already have strongly preexisting conflict toward the outgroup and compare the results with intergroup contexts that have less intergroup conflict. Moreover, it would be interesting to discover whether beneficiaries trust the motives of the benefactors when they feel gratitude towards them. It could help with discovering how outgroup-directed gratitude functions in an intergroup context with preexisting tension between groups.

Conclusion

In conclusion, outgroup-directed gratitude does not always lead to reduced outgroup prejudice and increases outgroup empathy in all intergroup contexts. Previous research has discovered that gratitude promotes social behaviour and decreases aggressive actions toward

others and increases well-being (Algoe, 2012; Bartlett, 2006; DeWall et al., 2011). Therefore, it is of great relevance to further research the conditions and limits of outgroup-directed gratitude as a beneficial emotion to reduce outgroup prejudice and increase outgroup empathy in an intergroup context.

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Appendix

Qualtrics Survey

"Your opinion about student organizations"

Why do I receive this information?

You are being asked to participate in a research study that is being conducted by a team of researchers from the Department of Social Psychology of the University of Groningen. You are being invited to participate in this study because you are a first-year student and listed in the SONA system. This research aims to better understand students' opinions and attitudes about different student groups and organizations. The study was evaluated by the Ethical Committee Psychology of the University of Groningen, and will be available from 8 May 2023 until 31 May 2023.

Do I have to participate in this research?

Participation in the research is voluntary. However, your consent is needed. Therefore, please read this information carefully. Ask all the questions you might have, for example because you do not understand something. Only afterwards you decide if you want to participate. If you decide to not participate, you do not need to explain why, and there will be no negative consequences for you. You have this right at all times, including after you have consented to participate in the research.

Why this research?

The goal of our study is to understand students' opinions about different student groups and organizations.

What do we ask of you during the research?

This study consists of two parts. Before you start completing the survey, you will be asked to give consent to participate. In the first part, you will be asked to answer several questions

about your opinions about some student groups or organizations. In the second part, you will receive some information about some groups of students, and answer some questions about them. Finally, you will complete a very short questionnaire. In total, your participation should take around 15 minutes. You will receive 0.4 SONA credits for your participation in this study.

What are the consequences of participation?

You will receive 0.4 SONA credits for your participation in this study. There are no direct risks associated with this research. Still we must highlight that you are free to refrain from participation at any point without any penalty. At the end of the study, we will give you more detailed information about the study.

How will we treat your data?

Your data will be used solely for education and scientific purposes. This means that your data will not be used for commercial purposes. We will treat your data with the most scientific care and in in compliance with the GDPR. Moreover, we ask you to provide some "indirectly identifiable personal data" (i.e., your age). We must note that your data will not be treated individually but as part of a group score, and only the primary researcher will have access to this data. Also your SONA number will not be linked to your data. The study is conducted via a platform, Qualtrics, which will collect your IP address. IP addresses will only be used to check for double participants and removed afterwards. All this data information will be fully deleted after 31 December 2023. You can contact the lead researcher Ana Leal (a.l.leal@rug.nl) to ask for any information regarding your data at any point until 31 December 2023.

What else do you need to know?

You may always ask questions about the research: now, during the research, and after the end of the research. You can do so by speaking with one of the researchers present, or by emailing

(a.l.leal@rug.nl) or phoning (+31 50 36 36301) the principal investigator.

Do you have questions or concerns regarding your rights as a research participant? For this you may also contact the Ethics Committee Psychology of the University of Groningen: ecp@rug.nl.

Do you have questions or concerns regarding your privacy, or regarding the handling of your personal data? For this you may also contact the Data Protection Officer of the University of Groningen: privacy@rug.nl.

As a research participant you have the right to a copy of this research information.

I have read the information about the research. I have had enough chance to ask questions

about it.

- Yes
- No

I understand what the research is about, what is being asked of me, which consequences participation can have, how my data will be handled, and what my rights are.

- Yes
- No

I understand that participation in the research is voluntary. I myself choose to participate. I can stop participating at any moment. If I stop, I do not need to explain why. Stopping will have no negative consequences for me.

- Yes
- No

Consent to participate in the research:

• Yes, I consent to participate, this consent is valid until 31-12-2023

• No, I do not consent to participate in this research

Consent for data processing:

• Yes, I consent to the processing of my personal data as mentioned in the research information. I know that until 31-12-2023 I can ask to have my data withdrawn and erased. I can also ask for this if I decide to stop participating in this research.

• No, I do not consent to the processing of my personal data.

In the first part of the study, we are interested in your opinions about different student societies in Groningen. Please answer each question as honestly as you can. There are no right or wrong answers.

Have you heard of the student society Vindicat?

- Yes
- No

Are you a member of Vindicat?

- Yes
- No

Please indicate how you feel towards Vindicat in general from 0 (extremely cold) to 100 (extremely warm): (Answering with a thermometer ranging from 0 to 100).

Have you heard of the student society Albertus?

- Yes
- No

Are you a member of Albertus?

Yes

No

Please indicate how you feel towards Albertus in general from 0 (extremely cold) to 100 (extremely warm): (Answering with a thermometer ranging from 0 to 100).

Have you heard of the student society Cleopatra?

- Yes
- No

Are you a member of Cleopatra?

- Yes
- No

Please indicate how you feel towards Cleopatra in general from 0 (extremely cold) to 100 (extremely warm): (Answering with a thermometer ranging from 0 to 100).

Thank you for answering these questions. Now you will receive some information about one specific group of students.

Outgroup-directed gratitude condition:

We would like to share some information about some social activism carried out by some Vindicat students, which may not be widely known.

There is a group of students who are part of Vindicat that have been actively involved in different initiatives aimed at supporting students in Groningen. They have especially taken an active role in promoting social justice, gender equality, cultural diversity, and sustainability at the university. In collaboration with different staff members from the university, they have organized social events, activities, and guest lectures to discuss and raise awareness about these issues. They have spoken up to improve equal opportunities, social safety, and environmentally friendly policies at the university.

General gratitude condition:

We would like to share some information about some social activism carried out by some **university students**, which may not be widely known.

There is a group of students from different faculties that has been actively involved in different initiatives aimed at supporting students in Groningen. They have especially taken an active role in *promoting social justice, gender equality, cultural diversity, and sustainability at the university.* In collaboration with different staff members from the university, they have organized social events, activities, and guest lectures to discuss and raise awareness about these issues. They have spoken up to improve equal opportunities, social safety, and environmentally friendly policies at the university.

After reading about the work carried out by these students, we would like to ask some questions about how you are feeling right now.

Please indicate how you are feeling right now.

- 1. Happy (answers ranging on a 7-point Likert scale with the labels: 1 = not at all, 7 = very much from left to right). The scale was the same for all items.
- 2. Outraged
- 3. Appreciative
- 4. Thankful
- 5. Angry
- 6. Embarrassed
- 7. Disgusted
- 8. Sad
- 9. Ashamed
- 10. Grateful
- 11. Enthusiastic

12. Guilty

Thank you for answering these questions. Now you have been assigned to answer some questions about students from one specific student society, Vindicat.

- 1. I feel empathy toward students who are members of Vindicat. (answers ranging on a 7-point Likert scale with the labels: 1 = not at all, 7 = very much from left to right). The scale was the same for all items.
- 2. I feel sympathy toward students who are members of Vindicat.
- 3. I feel compassion toward students who are members of Vindicat.
- 4. I feel connected to students who are members of Vindicat.
- 5. I have a lot in common with students who are members of Vindicat.
- 6. I feel a bond with students who are members of Vindicat.
- 7. I feel similar to students who are members of Vindicat.

I think that students who are members of Vindicat are...

- Sincere (answers ranging on a 7-point Likert scale with the labels: "Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree nor disagree", "Somewhat agree", "Agree", "Strongly agree" from left to right). The scale was the same for all items.
- 2. Trustworthy
- 3. Honest
- 4. Skilled
- 5. Friendly
- 6. Warm
- 7. Competent

- 8. Likeable
- 9. Intelligent

Lastly, we would like to ask you some final questions.

Please indicate your gender

- Male
- Female
- Other
- Prefer not to say

Please indicate your age. If you do not wish to indicate your age, leave this question blank and move on to the next one.

Please indicate in which Psychology Bachelor program you are enrolled.

- English
- Dutch
- Other

Is there a reason why you think we should not use your data? (for example, I could not understand some of the questions, the questions did not show up, technical issues, etc.)

Do you have any comments or concerns about this study?

Thank you for participating in this study!

Below we outline what this study was about

Don't forget to click --> at the bottom of the page to receive participation confirmation.

Purpose and key question of the study

In this study, we seek to test whether and how feeling grateful may help reduce negative

attitudes toward others. Particularly, we examine whether and how gratitude toward an outgroup (i.e., students from a student organization, Vindicat) may influence attitudes toward the same group.

Study tasks

As a participant in this study, you were randomly assigned to one of two conditions: outgroup gratitude, or gratitude. Specifically, you received some information about positive things that students of Vindicat have done for students (outgroup gratitude condition), or students have done for students (gratitude condition). Please note that information was purposely construed for this study (yet, it was based on some real information). We could not tell you what the purpose of the study was because that could have influenced your answers.

***Because other students may participate in this study, we would like to kindly ask you to please not discuss the purpose or details of this research with any other students.

More information?

In case you would like to know more about the research results or if you have questions about the study, please contact Ana Leal (a.l.leal@rug.nl).

Once again, thank you very much for your participation!