THE IMPACT OF INTERGROUP SIMILARITY ON PROSOCIAL BEHAVIOUR

by

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Abstract

Individuals are frequently asked to provide aid to those in need and social networking sites have become a popular vehicle for requesting such aid. The question of *who* is likely to receive help has applied implications, and research addressing this in an online context is timely. This study therefore evaluated the impact of intergroup similarity on online prosocial behaviour. Intergroup similarity was manipulated by altering the national identity of a recipient of aid ingroup (Canada), similar outgroup (United States), and dissimilar outgroup (South Africa). Prosocial behaviour was assessed on three measures: Facebook support (clicking ‘like’ or ‘share’ on Facebook), prosocial intentions (willingness to engage in prosocial behaviours with real world consequences: signing a petition, volunteering, donating, or fundraising), and prosocial action (behaviours with real world consequences: signing a petition, volunteering, donating or fundraising). Moderated multiple regression analyses assessed whether prosocial personality, civic engagement, and conservatism moderated the relationship between intergroup similarity and the three measures of prosociality. Main effects and moderation effects were generally consistent with the common ingroup identity model. Implications are discussed in relation to increasing the effectiveness of charitable campaigns and educational programs aimed at promoting prosocial behaviour.

*Keywords*: Intergroup relations, social identity, prosocial behaviour, social networking, online behaviour, prosocial personality, civic engagement, Conservatism, slacktivism
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The Impact of Intergroup Similarity on Prosocial Behaviour

Appeals for aid and charitable giving may seem more frequent than ever before. With so many calls for help encountered in daily life, from news stories to mailers to social media, questions of when, how, and who people help seem more relevant than ever before. The relatively recent use of social media as a means for soliciting support has opened up new lines of inquiry in terms of the nature and dynamics of online helping behaviour. Social media allows for the possibility of accessing a wider audience, which, in turn, should result in an increased number of donations and volunteers recruited. Recent research on slacktivism, however, has raised questions regarding the efficacy and authenticity of prosocial intentions expressed online and prosocial actions that result in real world consequences such as the works of Kristofferson, White, and Peloza (2014) and Penny (2014). Slacktivism refers to “a willingness to perform a relatively costless, token display of support for a social cause, with an accompanying lack of willingness to devote significant effort to enact meaningful change” (Kristofferson, et al., 2014, p. 1149).

In an effort to understand online helping behaviour, one may ask who gets help. It is relevant to know if people are likely to help others who seem very similar or different from his or her self. The internet provides a forum wherein individuals are exposed to, or have the opportunity to be exposed to, other individuals of different ethnicities, cultural background, and geographical locations. Not only does this exposure serve to provide information from a global perspective, but it also has the potential to reduce prejudice. Positive or neutral exposure to people from other groups has been shown to reduce prejudice (Allport, 1954). With the increasing popularity of appeals for aid on social media, the intergroup dynamics of online prosocial behaviours is a timely topic worthy of research attention.
Intergroup behaviour is often explained in relation to social identities. Social identity refers to an individual’s sense of self based on the groups to which they belong. Social identity is strongly tied and related to the groups to which the individual belongs and an individual’s social identity is an integral component of his or her self (Tajfel & Billig, 1974). A group or social category with which an individual strongly identifies is referred to as an ingroup, whereas outgroup refers to a group or social category that an individual does not hold membership. The ways in which individuals categorize themselves into groups is important in terms of social development and functioning within the social environment (Tajfel, Billig & Bundy, 1971; Billig & Tajfel, 1973). Individuals can belong to or identify with various ingroups, including those based on nationality, ethnic background, social status, hobbies, or special interests. These categorizations and comparisons to other groups help individuals to make sense of their social world and the role(s) they play within it (Tajfel, Billig & Bundy, 1971; Turner, Brown & Tajfel, 1979; Festinger, 1954).

It is well established there is a general tendency to favour the ingroup over an outgroup. What is less well known are the circumstances under which prosocial behaviour is extended to outgroups. The purpose of the current research is to assess the impact of intergroup similarity on online prosocial expressions, intentions, and actions with real world consequences. To date, there is little research examining prosociality where intergroup context is concerned, beyond the simply ingroup and outgroup. In order to assess the impact of intergroup similarity in various contexts on expressions of prosociality, this research aims to measure potential differences between helping behaviour toward an ingroup, a similar outgroup, and a dissimilar outgroup. Of particular interest is whether certain individual differences moderate the effects of intergroup similarity on prosocial responding. Previous research has found that degree of prosocial
personality, civic engagement, and conservatism are important predictors of prosocial responding (Skitka and Tetlock, 1986; Putnam, 2000; Finkelstein, Penner, & Brannick, 2005; Van Lange, Bekkers, Chirumnuolo, & Leone, 2012; Foschi & Lauriola, 2014). Importantly, this research evaluates these effects in the socially relevant context of online helping behaviour. Additionally, the research explores the moderating influence of a number of individual difference variables on the impact of intergroup similarity on prosocial behaviours expressed online.

**The Importance of Intergroup Similarity**

Individuals tend to associate with those who hold similar beliefs and attitudes (Festinger 1954; Corcoran, Crusius, & Mussweiler, 2011). Not only do individuals compare themselves to other individuals within their ingroup, they also compare themselves to members of outgroups. Following Festinger’s (1954) Social Comparison Theory, others have suggested that individuals may engage in the comparison process with the objective of increasing self-worth and self-esteem (Buunk & Gibbons, 2007; Corcoran et al, 2011).

Group categorizations allow individuals to both relate to and compare themselves to others, allowing for clear and basic distinctions, such as those who are better than and those who are worse than one’s own self, thus providing the individual with a structure for self-reference. Tajfel and Turner’s (1979) Social Identity Theory has three general assumptions. The first is that individuals will have an interest in increasing or maintaining self-esteem, and in theory, an individual will seek to establish positive self-esteem. The second is that a positive social identity arises when favourable comparisons can be made between one’s ingroup and a relevant outgroup. The third assumption is that the value of one’s own group is determined via comparison with other groups with regard to positive (value-based) traits and qualities. If the social identity of the ingroup is unfavourable, an individual will either attempt to exit the group
or find some other quality or characteristic upon which to make the ingroup more positively dissimilar from the outgroup.

**Intergroup Discrimination**

There is a substantial body of experimental research that suggests that people tend to favour the ingroup over the outgroup, even when groups are assigned on a trivial basis. The minimal groups paradigm manipulates the perception of intergroup similarity (Tajfel & Wilks, 1963). In minimal groups experiments, participants are assigned to groups with no real meaning outside of the laboratory, and there is no history or future of the group for its members (Turner, et. al., 1979). Even under these 'minimal' circumstances, group categories result in an 'us' and a 'them' and can alter the way individuals regard one another (Tajfel & Wilks, 1963).

For example, Tajfel, Billig, Bundy and Flament (1971) randomly assigned participants into two groups, either as ‘over estimators’ or ‘under estimators’, based on their estimates regarding the number of dots on a page. Participants were then given the opportunity to provide monetary rewards and punishments to other participants; however, they themselves would not be affected, positively or negatively, based on their decisions. The identities of the other participants were not known. Participants were identified only by numerical codes with accompanying group membership. The results showed that individuals favoured the ingroup by assigning more reward, and discriminated against the outgroup by assigning more punishment.

Turner et al., (1979) conducted a study with high school students, where intergroup similarity was derived from how the students described works of art in terms of colour and shape. These categorizations resulted in an ingroup, a relevant outgroup, and an irrelevant outgroup. Participants were asked to award points to other individual participants. The results
indicated a positive bias toward the ingroup. Moreover, participants were more discriminatory and less fair toward the relevant outgroup than they were toward the irrelevant outgroup.

There are two related but opposing theories regarding how individuals react toward similar outgroup members: distinctiveness threat theory and the common ingroup identity model. Distinctiveness threat theory suggests that the more similar an outgroup is to the ingroup, the more likely the ingroup will be to attempt to distance themselves and differentiate themselves from the outgroup (Jetten, Spears & Manstead, 1997). This often takes the form of discrimination toward the outgroup, and in turn, may lead to a reduced willingness to provide aid.

A 2001 study by Jetten, Spears, and Manstead randomly assigned participants to one of two groups: those who were detailed perceivers and those who were global perceivers. Participants believed that their group membership was based on their performance in a dot estimation task. After the task participants were presented with the degree of similarity of intergroup norms and were asked to allocate funds between their own group and the outgroup. Funds were to be allocated between the detailed and global perceives using one of four strategies: 1) detailed and global perceivers joint profits maximized; 2) equal amounts to both; 3) detailed perceivers profits maximized; and 4) global perceivers profits maximized. Jetten and colleagues found that similarity of intergroup norms led to increased ingroup favouritism for high identifiers (those who more strongly identified with the ingroup) and more positive ingroup evaluations.

Conversely, the common ingroup identity model suggests that similarity reduces ingroup bias. The ingroup begins to recategorize outgroup members into a new category that holds both ingroup and the outgroup (Gaertner, Mann, Murelle & Dovidio, 1989). Gaertner and colleagues
induced recategorization of outgroup members by manipulating the perception of whether groups were comprised of either two separate groups, one group, or as separate individuals. Participants were divided into groups of six and then into groups of three and were asked to find a solution to a survival problem. The problem was first worked on individually, second by a three-person group, and third by a six-person group. For the six-person group discussions, participants were seated based on the condition they were assigned to: one group condition ababab; two groups condition aaabbb; separate individuals condition performed an additional survival problem-solving task, independently. Following the group discussions participants were asked to indicate who they would select as a group leader and rate how close the aggregated group felt: like one group, like two groups, or like separate individuals. Results revealed that individuals in the one group and separate individuals conditions demonstrated reduced intergroup bias, compared to the two separate groups condition, which suggests that recategorization of outgroup members can result in reduced intergroup discrimination.

The minimal groups experiments provide evidence that ingroup bias and intergroup discrimination can be found in the most minimal social environments (Turner, et. al., 1979). It is not always the case that the outgroup is discriminated against due to conflict or past experience. In some cases, ingroup bias is present when there has been no prior contact or knowledge of the outgroup, or even to the (experimentally assigned) ingroup. The present research was concerned with intergroup discrimination in prosocial behaviour.

**Prosocial and Altruistic Action**

There are many theories that attempt to explain why individuals behave in prosocial or altruistic ways (Smith, 1964; Tankersley, 2009). Kin selection theory posits that individuals are more likely to engage in altruistic behaviours toward those who are most closely related to them.
genetically, as it results in greater benefit with regard to gene survival (Smith, 1964). The
tendency to favour one’s ingroup may be evolutionarily based. The first ingroup an individual
encounters is his or her kin. As the kin selection theory states, the more genetically related
individuals are, the more likely they are to help and be helped by genetic relatives. In our
ancestral past, an individual’s ingroup provided protection and safety, as well as a vehicle
through which to disseminate social and cultural norms.

The personal or behavioural altruism perspective differs from the evolutionary
perspective in that it is not motivated by biological instincts related to survival or fitness, but
rather by a desire to provide aid to another individual without the expectation of reciprocation or
personal gain (Tankersley, 2009). For example, when helping someone pick up papers they have
dropped, there is no expectation that the recipient of the help will later assist the helper.
Tankersley (2009) argues that although psychological altruism is the result of biological and
evolutionary functions, this does not signify that all altruistic acts are rooted in evolutionary or
biological reasons because human beings are biological creatures. Rather, she suggests, “if a
behavior does not have fitness consequences for the agent and the recipient, then it does not
satisfy the criterion of the technical use of the term Evolutionary Altruism” (Tankersley, 2009, p. 7)

The social identity perspective also suggests that individuals are more likely to help those
who are similar to one’s own self and not solely due to biological similarities. Individuals are
more likely to provide aid to ingroup members than they are to outgroup members, even when
groups are assigned on a trivial basis (Turner, Brown, & Tajfel, 1979; Tajfel & Turner, 1979).
As elaborated upon below, when intergroup similarity decreases, helping behaviours frequently
also decrease
Intergroup Discrimination and Prosocial Behaviour

To date, research that has looked at the impact of intergroup similarity on prosocial behaviour has examined the influence of intergroup contact and, to a lesser extent, intergroup similarity on prosocial responding. Allen and Wilder (1975) examined the potential impact of similarity on outgroup prejudice and ingroup favouritism. Participants first completed an attitudinal inventory that covered various topics including artistic and political beliefs. Following completion of the questionnaire, participants were randomly assigned to two arbitrary groups. Participants were told that the two groups were based on painting preferences selected during the attitude questionnaire. The experimenter summarized the alleged similarity between the participant and the members of the ingroup and outgroups. The degree of similarity was determined by one of four experimental conditions based on varying combinations of similarity and dissimilarity between ingroup or outgroup members on responses to the attitude inventory: 1) ingroup and outgroup similar; 2) ingroup and outgroup dissimilar; 3) ingroup similar, outgroup dissimilar; and 4) ingroup dissimilar and outgroup similar. The experimenter then asked the participant to assign points to other participants, identified only by number and intergroup similarity. Points could not be assigned to one’s self. They found that outgroup similarity did not significantly influence outgroup prejudice, but that ingroup similarity (as opposed to ingroup dissimilarity) significantly increased ingroup bias. Although the results of the study did support the hypothesis that individuals tend to favour similar individuals over dissimilar individuals, it was only true in relation to the ingroup. Similarity of outgroup members was not a significant factor in intergroup discrimination; the similarity of outgroup members did not increase or decrease the preference for one outgroup over the other.
In a study of German employees Koschate, Oethinger, Kuchenbrandt, and Van Dick (2012) examined whether the type of contact between ingroups and outgroups played a role in expressions of prosocial behaviours toward individual outgroup members and toward the outgroup as a whole. They found that personal contact (contact not related to work, such as socialization with outgroup member outside of work) was a better predictor of behaviours expressed toward individual outgroup members. Additionally, they found that task-oriented contact (contact with outgroup member restricted to workplace, such as working with members of the outgroup on a somewhat regular basis) was a better predictor of prosocial behaviours expressed toward an outgroup as a whole. The participants in this research, however, were employees of the same company; therefore the sample appears to have consisted of more similar than dissimilar outgroups. Due to the strong intergroup similarity, these same effects may not be present between ingroups and dissimilar outgroups.

The present research evaluates the impact of intergroup similarity with respect to groups that have real life significance for participants by experimentally manipulating the national identity of the target recipient of prosocial behaviour. Moreover, I assessed helping behaviour in the externally valid setting of online behaviour. Recent research suggests that people may be particularly likely to engage in pseudo-prosocial, or slacktivist, behaviours in online settings, and I was interested in how intergroup similarity influenced this tendency.

**Slacktivism**

The majority of existing research on slacktivism is in relation to political activism and political movements. To date, there is little research on the slacktivism phenomenon in relation to prosocial behaviours, particularly where intergroup context is concerned. Kristofferson et al. (2014) found that the social observability of initial tokens of support (i.e. liking or sharing
something on social networking websites, such as Facebook) played a role in subsequent gestures of support, specifically, the meaningfulness of said subsequent support. Individuals were less likely to internalize the token as being important or congruent with their own value systems when the display was public (versus private), which is the case with prosocial intentions expressed on social networking sites (i.e. Facebook; Kristofferson et al., 2014).

There are likely psychological and social rewards from displays of prosocial behaviour on social media. It is unclear as to whether online prosocial expressions are effective or whether they are in fact activist in nature. Bucy and Gregson (2001) maintain that expressions at the individual level, such as those conveyed on social networking websites, are more representative of ‘media participation’ as opposed to actual activism. Further, they suggest that these types of behaviours are symbolic actions and are not the same as real-life participation in the expressed intention. Penny’s (2014) findings, from semi-structured interviews, suggest that public media displays of political content may detract from other more useful techniques such as lobbying due to the ease of clicking links on a computer and that there was “no relationship between symbolic action and organizational political activity” (p. 13). Although the work of Penny (2014) as well as Bucy and Gregson (2001) relates to political activism/participation, they can inform hypotheses about slacktivism.

There is debate as to the effectiveness and authenticity of prosocial intentions expressed online. Is it the case that online activism leads to activism in real world settings (Lee & Hsieh, 2013; Warren, Sulaiman & Jaafar, 2014), or does online activism reduce the amount and quality of real world prosocial expressions (Kristofferson et al., 2014; Penny, 2014)? One way to measure this is to examine who the intended targets of online support are and how much support they actually receive from those who offer low-risk, low-cost tokens of support online.
Current Research

The present research seeks to examine the influence intergroup similarity on prosocial behaviours expressed online. Specifically, this research seeks to examine whether there are intergroup differences with regard to prosocial support expressed online (Facebook), real world (offline) prosocial intentions, and prosocial actions the result in real world consequences (e.g. volunteering or donating). To my knowledge, no research has manipulated intergroup similarity of the target-other (intended recipient of aid) and evaluated effects on online prosocial behaviour.

Intergroup discrimination research typically focuses on the tendency to favour the ingroup over the outgroup. The differences between behaviours expressed toward similar and dissimilar outgroup members is less frequently examined. As a step toward addressing this, the present study aimed to examine whether there is a relationship between outgroup similarity and varying degrees of prosocial expression. On one hand, distinctiveness threat theory suggests that outgroup similarity may increase ingroup bias in attempt to differentiate one’s own group from the outgroup in order to preserve a distinct identity from the outgroup (Jetten et al., 1997). On the other hand, the common ingroup identity model suggests that in some contexts group similarity may expand group boundaries resulting in favouritism shown to a similar outgroup as opposed to a dissimilar one (Gaertner, Mann, Murrell, & Dovidio, 1989).

An additional aim of this research is to provide further understanding of the phenomenon of slacktivism. As this is a novel area of research, the results of this study will contribute significantly to the existing social psychological literature regarding expressions of prosocial behaviour in both online and real world settings. Moreover, the results of this study may help explain and predict prosocial behaviours as they are expressed in social networking contexts as
well as aid individuals in developing strategies for increasing the effectiveness and authenticity of their prosocial behaviours.

There are three primary research questions present study aimed to answer. With regard to the intergroup similarity between an individual and a target recipient of aid: 1) Does intergroup similarity affect online prosocial behaviour, as measured by Facebook support, prosocial intentions, and prosocial action?; 2) Is there a tendency toward slacktivism when it comes to online prosocial behaviour? Specifically, is there a low correlation between online support and prosocial action?; and 3) in terms out groups, who is more likely to receive real-world aid: similar or dissimilar outgroup members?

**Hypotheses**

1) Individuals will express more Facebook support toward ingroup members than toward outgroup members.

2) Individuals will exhibit more prosocial intentions toward ingroup members and similar outgroup members.

3) Individuals will participate in more prosocial actions toward ingroup members than toward both types of outgroup members.

4) The likelihood of prosocial action (with real-world consequences) will be lowest for dissimilar outgroups and highest for ingroups.

5) There will be a negative relationship between Facebook support and Prosocial Action.

In keeping with existing literature regarding ingroup-outgroup helping behaviours, it is expected that individuals will provide aid to those with whom they most closely identify (i.e. ingroup), as suggested by the common ingroup identity model; prosocial intentions and prosocial actions will occur most frequently toward ingroup members. With regard to the second and fourth hypotheses, although it is a possibility that distinctiveness threat will lead to fewer prosocial intentions expressed toward the similar outgroup, I believe that participants will utilize the common ingroup identity model in favouring one outgroup over another. Although research
relating to the effectiveness of online activism is divided, consistent with the notion of slactivism, I believe that individuals who participate in online activism will be less likely to engage in prosocial behaviours that involve real action.

**Potential Moderating Variables**

In addition to the key research questions stated above, three individual difference measures that could modify the results were assessed: Prosocial Personality, Civic Engagement, and Conservatism.¹ These measures and their corresponding hypotheses are discussed in below.

**Prosocial personality.** Much of the early research on why people behave prosocially found that situational factors were the most influential; however, in the 1980’s research began to find evidence to suggest that there were personality factors correlated with prosociality (O’Connor & Cuevas, 1982). Prosocial personality orientation, as defined by Penner and colleagues (2002), is an enduring dispositional inclination to act in ways that benefit others, as a result of feeling empathy and concern for others, as well as taking into consideration the rights and overall well-being of others.

Penner and colleagues (2002) found that this dispositional trait was comprised of two main factors: other-oriented empathy and helpfulness. Other-oriented empathy is related to the tendency to feel empathy and be generally concerned for others, whereas, helpfulness is related to the proclivity to perform helpful acts. An important distinction between the two is that one relies on internal dispositional processes and the other on past experiences, and may relate to both dispositional and situational factors. An individual’s propensity to behave prosocially is expected to be related to Facebook support, prosocial intent, and prosocial action. Prosocial

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¹ Additional individual difference variables, including: personal altruism, self-monitoring, social dominance orientation, belief in a just world, and perceived intergroup similarity were assessed for exploratory purposes.
orientation is expected to be related to an individual’s willingness to engage in prosocial action with real world consequences, such that, higher prosocial personality will be related to increased participation in prosocial actions than individuals with lower prosocial orientation. For individuals with low levels of prosocial personality intergroup similarity will result in increased favourable ingroup bias and more discrimination toward outgroup members, particularly toward the dissimilar outgroup.

**Civic engagement.** For the purposes of this study, civic engagement refers to how connected a person is with society and his or her degree of social participation and included actions resulting from perceived personal responsibility for larger issues within a community (Putnam, 2000; Foschi & Lauriola, 2014). Social participation can be expressed in various ways and can include actions such as volunteering, organizational involvement (service organizations such as the Rotary Club or Habitat for Humanity), and electoral participation. An individual’s degree of social participation may be related to how likely they are to be preconditioned to help through Facebook. Putnam (2000) argues that the types of societal interactions individuals have is an important predictor of his or her willingness to participate in all aspects of a society, including activism. An individual’s level of civic engagement is expected to be related to the amount of real-world aid they are willing to provide to others. It is hypothesized that individuals with high levels of civic engagement will be more likely to engage in prosocial actions. Further, I hypothesize that civic engagement will play a moderating role, such that at low levels of civic engagement there will be more ingroup favouritism than at higher levels.

**Conservatism.** Conservatism relates to right-wing political views. Typically these views are associated with orthodox religiosity, individualism, and traditionalism. Whereas, Liberalism, the opposite of conservatism, is related to collectivism, social change, equality of
opportunity, and human rights. Eisenberg-Berg (1976) found that liberalism was predicted by prosocial moral reasoning. Further, in 1979, Eisenberg-Berg established that moral judgement in females, with liberal socio-political inclinations, was related to liberalism. According to Skitka and Tetlock (1986) individuals with conservative orientations are less likely, when compared to liberals, to provide aid when there is a personal cost to do so, particularly to those whom they deem as being personally responsible or having violated a social norm. Conservatives tend to adopt the viewpoint that hard work is rewarded, and those who require social assistance are ‘freeloaders’ (Skitka & Tetlock, 1986).

Using a forced-choice deconstructed game paradigm, Van Lange, Bekkers, Chirumnolo, and Leone (2012) found that prosocial individuals were less likely to hold conservative political attitudes and beliefs. Even though, as suggested by Skitka and Tetlock (1986), gender may play a role in liberalism as it related to moral judgement, after controlling for gender and age, the findings of Van Lange et al (2012) continued to suggest that those who were prosocial tended to hold liberal views whereas those who were more individualistic in nature were more likely to be conservative. I hypothesize that Conservatism will play a moderating role, such that at high levels of conservatism outgroup discrimination will be present, particularly toward the dissimilar outgroup target.

**Summary of Moderation Hypotheses.**

1) At low levels of prosocial personality, group affiliation will result in reduced helping expressions and behaviours toward outgroup members, particularly dissimilar outgroup members.
2) At low levels of prosocial personality, group affiliation ingroup favouritism will result in reduced helping expressions and behaviours toward outgroup members, particularly dissimilar outgroup members.

3) At high levels of conservatism, outgroup discrimination will be present, particularly toward the dissimilar outgroup target.

**Design Overview**

Individual difference variables (prosocial personality, civic engagement, and conservatism) were assessed with scale measures. For the manipulation of intergroup similarity, participants were exposed to one of three randomly assigned vignettes (ingroup, similar outgroup, dissimilar outgroup) about a person with a serious illness. The vignettes were the same except for the national identity of the target, who was described as being either Canadian (ingroup), American (similar outgroup), or South African (dissimilar outgroup). Prosocial behaviour was then assessed in three ways: 1) likelihood of showing support on Facebook by ‘liking’ or ‘sharing’ Facebook posts; 2) likelihood of future prosocial actions with real world consequences; and 3) opportunities to participate in prosocial behaviours that result in real world outcomes such as signing a petition, donating, and signing up to fundraise and/or volunteer.

**Method**

**Sample**

Participants were recruited from the student populations of Laurentian University’s Sudbury and Barrie campuses. Subjects received partial credit toward their course work as compensation for their participation. The data was collected electronically online using Qualtrics Insight Platform software (Qualtrics, 2016).

**Materials**
Participants completed a number of individual difference measures. Of primary interest were the measures relating to Prosocial Personality, Civic Engagement, and Conservatism. The specifics of the three individual measures used, including number of items and psychometric properties, are discussed below.

**Indiscriminate Responses Scale.** Items from Marjanovic’s (2011) Indiscriminate Response Scale was used in order to identify participants who did not attend to the questionnaire items. The scale includes seven items that directly state how the participant is to respond; for example, “To respond to this question, please choose “slightly agree”. The effectiveness of the scale is increased when participants are advised that there are such questions embedded throughout the study and when the questions are randomly distributed throughout the other measured used. Both of these conditions were met: participants were advised prior to beginning the study that some questions would tell them exactly how to respond and the seven indiscriminate response questions were interspersed throughout the three individual measures used.

**Prosocial Personality Battery.** The Prosocial Personality Battery (PPB) is a 30-item self-report inventory that measures prosocial traits on seven dimensions, including social responsibility, empathic concern, perspective taking, and other-oriented reasoning (Penner, 2002). Participants respond using a 5-point Likert scale, ranging from ‘strongly disagree’ to ‘strongly agree’. The reliability coefficient based on the current sample was 0.79. Sample items include: “I choose a course of action that maximizes the help other people receive”, “I choose a course of action that considers the rights of all people involved”, and “My decisions are usually based on concern for the welfare of others”.

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2 See appendices regarding exploratory individual difference measures and relevant results.
**Civic Engagement.** Participants responded to a series of 11 questions relating to their civic involvement, including voting practices, community involvement, and religious attendance. Questions were devised based on key elements identified by Putnam (2000) as being important measures of civic involvement, with a reliability coefficient of $0.73^3$, based on the current sample. The first eight questions were scored on either a 5-point frequency scale, ranging from never to all the time; the last three questions were scored on a 7-point frequency scale, ranging from never to more than once per day. For analysis purposes, means were calculated after the individual items were converted to z-scores.

**Conservatism-Liberalism Scale.** Mehrabian’s (1996) Conservatism-Liberalism scale provides an assessment of participants’ political orientation using a 7-point Likert scale, with response options ranging from very strong disagreement to very strong agreement. The scale includes 14 items that relate to either conservative or liberal views (some items are reverse scored). Lower scores are representative of strong liberalist views and, conversely, higher scores are reflective of strong conservative views. Example items include “Communism has been proven to be a failed political ideology”, “The major national media are too left-wing for my taste”, and “In any election, given a choice between a Liberal and a Conservative candidate, I will select the Conservative over the Liberal”. Mehrabian (1996) states that the scale was designed to be general in nature, insofar that it is not reflective of specific political issues, that are often related to specific points in history. The reliability coefficient for this scale was 0.75.

**Vignettes.** The vignettes were created to be similar in style and content as those frequently seen on social networking websites, such as Facebook. The vignettes varied by country of origin only. All other information and images were identical (see Appendix A for

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3 One item, “Do you vote in school/campus elections?” was removed based on reliability analysis. Cronbach’s alpha prior to deletion was 0.67.
example). A medical issue was selected as the cause because postings on social networking sites requesting and/or promoting slacktivist-style support (clicking ‘like’ or ‘share’ on Facebook) are often medical or health related.

**Huntington’s Disease is not a cause that has been ‘popular’ or commonly advocated for on social networking and it is not frequently discussed or advocated for in other media sources (i.e. television and radio).** The prevalence rates of Huntington’s in the Canada and the United States are > 5 per 100,000 in the population, and South Africa is slightly lower, 1-5 per 100,000 (WHO, 2008; Warby et al., 2011). Despite this, it is expected that participants will generally believe that Huntington’s has approximately the same prevalence rates in the three different settings, and this will be verified in a question at the end of the study.

**Intergroup Similarity Manipulation**

The independent variable of intergroup similarity was assessed on three levels: ingroup, similar outgroup, and dissimilar outgroup. The intergroup similarity of the target recipient of aid (the individual who is in need of help) was differentiated by country of origin: Canada (ingroup), United States (similar outgroup), and South Africa (dissimilar outgroup).

Previous research has used Americans and Australians as similar and dissimilar outgroup members, respectively, and found the United States served as a “chronically accessible out-group for social comparison” for Canadians, but that Canadian’s, on average, have little information regarding Australia and Australians (Lalonde, 2002, p. 617). However, the pilot study suggested that Australia was often viewed as a similar not dissimilar outgroup, as it was frequently ranked as being more similar to Canada than the United States. Based on the results of the pilot study, South Africa was used as the dissimilar outgroup.
In order to avoid the groups varying on different dimensions, the outgroups were selected based on several key factors. Both the United States and South Africa were, previously, British colonies, have predominately Western views, and the religious affiliation of the population is largely Christian (Elphick & Davenport, 1997). English is one of the official or primary languages spoken in all three countries is English. South Africa and Canada are more distant geographically than are Canada and the United States. The United States and Canada are physically connected geographically. Comparisons are frequently drawn between Canada and the United States, with the latter often being reported on (news, politics, pop culture, and weather) in media shown in Canada (Lalonde, 2002). Americans are an accessible and relevant outgroup for Canadians more so than South Africans due to the amount, frequency, and types of exposure they have to the United States over South Africa.

Attitudinal & Behavioural Measures

Prosociality was assessed through responses to three dependent variables: Facebook Support, Prosocial Intention, and Prosocial Action. Facebook Support and Prosocial Intention were measured using a 5-point Likert scale, ranging from 1 very unlikely to 5 very likely. Prosocial Action was measured used a dichotomous response option (yes or no) for each of the opportunities presented.

Procedure

All data was collected electronically through Qualtrics Insight Platform, an online survey software system (Qualtrics, 2016). The study took less than 30 minutes to complete. Once informed consent had been obtained, participants completed the individual difference measures (prosocial personality, altruism, self-monitoring, civic engagement, social dominance orientation, conservatism, and belief in a just world) before being randomly assigned to one of
the three conditions intergroup similarity conditions. Each participant was then presented with a single vignette belonging to one of the three intergroup similarity conditions. Immediately following the presentation of the vignette, the participants rated the perceived similarity between his- or herself and the target other.

Subsequent to the presentation of the stimulus, participants were asked to respond to items related to Facebook Support, Prosocial Intent, and Prosocial Action. Facebook Support assessed the likelihood of expressing or endorsing supportive sentiments for a cause on Facebook and how support or advocacy would be expressed. Participants rated how likely they would be to 1) ‘like’, 2) ‘share’, or 3) ignore the information if it were presented on a social networking site such as Facebook. Prosocial Intent assessed the likelihood of engaging in four behavioural tasks that varied by degree of commitment: 1) signing an online petition, 2) participating in a fundraising event, 3) donating money or goods; and/or 4) volunteering time. In contrast to the opportunities available for Facebook Support, each Prosocial Intent task, if participated in, would result in measurable consequences in a real world context.

Following the initial presentation of the behavioural tasks (Prosocial Intent), participants were given the opportunity to engage in each of the four behaviours (Prosocial Action). Participants could select ‘yes’ to visit the website or ‘no’ and move on to the next screen. Each behavioural opportunity was presented one at a time, accompanied by a link to a website that corresponded with the task. All links opened in a new window and all opportunities corresponded with the national identity used in the vignette. For example, for the petition behavioural measure, those exposed to the ingroup condition participants were presented with the opportunity to sign a petition to end genetic discrimination in Canada.
It is of note that all of the opportunities presented were current and ongoing, meaning that if an individual signed a petition it was a real petition that they signed. It is also important to note that the information the individual entered into any of the websites was not captured, so as to maintain confidentiality anonymity.

After completing all measures, participants provided some demographic information including sex, age, religious affiliation, country of origin, and date of immigration (if applicable). Following the demographic questionnaire all participants were debriefed and provided with the opportunity to receive the results of the study. (Note: Participants were informed that it was not possible to receive his or her individual results and that the overall results of the study would be available to them at a later time.)

Results

Data Screening

The original sample included 156 participants. A total of 34 participants were removed from the analysis, of which, twenty-five had not been exposed to the experimental manipulation, seven due to more than two inaccurate responses on the indiscriminate response scale (IRS), and two based on outlier analyses. A total of eight cases were identified as outliers, however, based on data screening (see Appendix B) only two were excluded from analyses.

The final sample included 122 participants (100 females, 21 males, 1 undisclosed) with a mean age of 22.32. Of these, 103 were born in Canada, 3 in the United States, and the remaining were born in various other European (4), Asian (3) South American (2), and African countries (2), (Missing 5). English was reported as a language spoken at home for 112 of the participants, 92 participants citing it as the only language spoken in the home.
### Descriptive Statistics and Group Differences

Table 1.

*Means, Standard Deviation, and Intercorrelations for Moderator and Dependent Variables*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderator Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. PP</td>
<td>4.69</td>
<td>0.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. PA</td>
<td>5.70</td>
<td>0.63</td>
<td></td>
<td>.61**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. FSM a</td>
<td>4.66</td>
<td>2.29</td>
<td></td>
<td></td>
<td>- .08</td>
<td>.22*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CE</td>
<td>.002</td>
<td>0.54</td>
<td></td>
<td>.33**</td>
<td>.24**</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. SDO</td>
<td>2.67</td>
<td>0.79</td>
<td></td>
<td>- .23</td>
<td>-.35**</td>
<td>.18</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. CL</td>
<td>3.48</td>
<td>0.90</td>
<td></td>
<td>-.09</td>
<td>-.11</td>
<td>.06</td>
<td>.09</td>
<td>.42**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. BJW</td>
<td>4.29</td>
<td>0.66</td>
<td></td>
<td>.12</td>
<td>-.12</td>
<td>.19*</td>
<td>-.09</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. PS aa</td>
<td>2.89</td>
<td>1.81</td>
<td></td>
<td>.22*</td>
<td>.17</td>
<td>.25**</td>
<td>-.13</td>
<td>.05</td>
<td>.05</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Facebook Support</td>
<td>4.02</td>
<td>1.84</td>
<td></td>
<td>.37**</td>
<td>.41**</td>
<td>.02</td>
<td>.35**</td>
<td>-.06</td>
<td>.16</td>
<td>.16</td>
<td>.31**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Prosocial Intent</td>
<td>4.49</td>
<td>1.47</td>
<td></td>
<td>.38**</td>
<td>.37**</td>
<td>.08</td>
<td>.20*</td>
<td>-.06</td>
<td>-.00</td>
<td>.11</td>
<td>.25**</td>
<td>.52**</td>
<td></td>
</tr>
<tr>
<td>11. Prosocial Action</td>
<td>1.09</td>
<td>1.17</td>
<td></td>
<td>.27**</td>
<td>.27**</td>
<td>-.00</td>
<td>.37**</td>
<td>-.07</td>
<td>-.01</td>
<td>-.02</td>
<td>.04</td>
<td>.20</td>
<td>.33**</td>
</tr>
</tbody>
</table>

Note. \( N = 122\) for each cell. PP=Prosocial Personality, PA=Personal Altruism, FSM= Facebook Self-Monitoring, CE= Civic Engagement, SDO= Social Dominance Orientation, CL=Conservatism-Liberalism, BJW=Belief in a Just World, PS=Perceived Similarity.

\( a \) \( N = 96\)

\( aa \) \( nN = 121\) for this cell

* correlation is significant at \( p < .05\)

** correlation is significant at \( p < .01\)

---

\(^{4}\) Bivariate correlation analyses were conducted between Facebook Support and Prosocial Action. There was a significant correlation between Facebook Support and Prosocial Action for the ingroup condition (\( p = .02\)), however, tests of the difference between two independent correlation coefficients indicated no significant correlations between conditions.
One-way between-subjects analysis of variance tests were conducted (separately) to explore the effect of intergroup similarity (ingroup, similar outgroup, and dissimilar outgroup) on Facebook support, prosocial intent, and prosocial action. The means, standard deviations, and results of the ANOVA can be found in Table 3. There were no significant main effects of intergroup similarity on Facebook support [\(F(2, 119), p = .8, \eta^2 < .01\)] or prosocial intent [\(F(2, 119), p = .49, \eta^2 = .01\)] for the three intergroup similarity conditions. There was, however, a significant effect of intergroup similarity on prosocial action [\(F(2, 93) = 3.14, p = .048, \eta^2 = .07\)].

Post hoc comparisons using the Tukey HSD test indicated that the mean score for the similar outgroup condition (\(M = 0.76, SD = 1.44\)) was significantly lower than the dissimilar outgroup condition (\(M = 1.44, SD = 1.77\)). Notably, the ingroup condition (\(M = 104, SD = 1.56\)) did not significantly differ from the similar outgroup and dissimilar outgroup conditions. These results suggest that intergroup similarity affects prosocial action. Specifically, the results suggest that individuals are more likely to provide real aid to a dissimilar outgroup member compared to a similar outgroup member.

Table 2.

Descriptive Statistics for Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ingroup</th>
<th>Similar Outgroup</th>
<th>Dissimilar Outgroup</th>
<th>(F(2, 119))</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook Support</td>
<td>4.01</td>
<td>4.17</td>
<td>3.89</td>
<td>0.23</td>
<td>.80</td>
</tr>
<tr>
<td>Prosocial Intent</td>
<td>4.43</td>
<td>4.72</td>
<td>4.34</td>
<td>0.72</td>
<td>.49</td>
</tr>
<tr>
<td>Prosocial Action(^a)</td>
<td>1.04</td>
<td>0.76(^c)</td>
<td>1.44(^c)</td>
<td>3.14(^b)</td>
<td>.05(^*)</td>
</tr>
</tbody>
</table>

Note. Ingroup \(n = 43\), Similar Outgroup \(n = 38\), Dissimilar Outgroup \(n = 41\)

\(^a\) Ingroup \(n = 27\), Similar Outgroup \(n = 33\), Dissimilar Outgroup \(n = 36\)

\(^b\) \(F(2, 93)\)

\(^c\) ingroup, similar outgroup > dissimilar outgroup

\(^*\) significant at \(p < .05\)
Moderation Analyses

Moderated multiple regressions were conducted to investigate the relationship between prosocial personality, intergroup similarity, and their interaction as predictors of each criterion variable (Facebook support, Prosocial Intent, and Prosocial Action). This process was repeated for each of the other moderator variables (Civic Engagement and Conservativism). Results revealed significant moderated interactions, the specifics of which are discussed in detail below. (Additional analyses and results involving the other moderator variables analyzed can be found in Appendices C-G.)

The PROCESS version 2.13 macro (Hayes, 2013) for IBM Statistical Package for the Social Sciences (SPSS) version 20 was used to conduct moderated multiple regressions to examine interactions between individual difference predictors (potential moderators) and the manipulated categorical predictor of intergroup similarity and the resulting expressions of Facebook Support, Prosocial Intention, and Prosocial Action. Due to the multi-level nature of the categorical predictor, intergroup similarity was dummy-coded (see Table 1). The first set of dummy codes, the centered continuous potential moderator variable, and the two-way interaction terms were entered simultaneously into the regression equation. This process was then repeated for each potential moderator variable followed by repetition of the same process for the second set of dummy codes.
Table 3.

**Dummy codes for Intergroup Similarity Manipulation**

<table>
<thead>
<tr>
<th>Intergroup Similarity Condition</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingroup</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Similar Outgroup</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dissimilar Outgroup</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Prosocial Personality.** Prosocial Personality moderated the effects of group manipulation on Facebook Support. Results revealed significant Prosocial Personality X Dissimilar Outgroup vs. Ingroup and Prosocial Personality X Dissimilar Outgroup vs. Similar Outgroup interactions. Simple slopes analysis, as seen in Figure 1, indicated that there were significant simple slopes of Prosocial Personality in the ingroup and similar outgroup conditions. Specifically, prosocial personality predicted Facebook support among those exposed to the ingroup ($p = .0001$) and similar outgroup ($p = .002$) conditions. Additionally, there was a significant difference between ingroup and dissimilar outgroup ($p = .03$) at high levels of prosocial personality, such that individuals exposed to the ingroup demonstrated higher Facebook support, relative to the dissimilar outgroup. Regression coefficients are presented in Tables 4 and 5. The simple slopes of the interaction are presented in Figure 1.

Prosocial Personality also moderated Prosocial Intent. Simple slopes analysis indicated that there was a significant simple slope of Prosocial Personality in the ingroup ($p = .003$) and similar outgroup ($p = .0001$) conditions. Additionally, there was a significant difference between the simple slopes of ingroup and dissimilar outgroup ($p = .046$) at high levels of Prosocial Personality, such that individuals exposed to the ingroup demonstrated lower prosocial intent,
relative to the dissimilar outgroup condition. The regression coefficients and simple slopes of the interaction are presented in Tables 6 and 7, and Figure 2, respectively.

Table 4.

Regression Model Coefficients for Prosocial Personality by Similar and Dissimilar Outgroups vs. Ingroup on Facebook Support.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.12 (0.26)</td>
<td>15.95</td>
<td>.00</td>
</tr>
<tr>
<td>Prosocial Personality</td>
<td>2.28 (0.56)</td>
<td>4.09</td>
<td>.00***</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>-0.13 (0.38)</td>
<td>-0.35</td>
<td>.72</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>-0.23 (0.37)</td>
<td>-0.62</td>
<td>.54</td>
</tr>
<tr>
<td>Prosocial Personality x Similar Outgroup vs. Ingroup</td>
<td>-0.43 (0.81)</td>
<td>-0.53</td>
<td>.60</td>
</tr>
<tr>
<td>Prosocial Personality x Dissimilar Outgroup vs. Ingroup</td>
<td>-2.18 (0.85)</td>
<td>-2.57</td>
<td>.01**</td>
</tr>
</tbody>
</table>

Model R2                               | 0.19             | F = 5.45 | .00***|
Interaction 1 ΔR2                       | 0.00**           | F = 0.27 | .60  |
Interaction 2 ΔR2                       | 0.04*            | F = 3.28 | .01**|
Interaction ΔR2                         | 0.02*            | F = 1.71 | .03* |

Note. All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05
** p ≤ .01
*** p ≤ .001
**Table 5.**

*Regression Model Coefficients for Prosocial Personality by Ingroup and Dissimilar Outgroups vs. Similar Outgroup on Facebook Support*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.99 (0.27)</td>
<td>14.26</td>
<td>.00</td>
</tr>
<tr>
<td>Prosocial Personality</td>
<td>1.86 (0.59)</td>
<td>3.15</td>
<td>.00**</td>
</tr>
<tr>
<td>Ingroup vs. Similar Outgroup</td>
<td>0.13 (0.38)</td>
<td>0.35</td>
<td>.72</td>
</tr>
<tr>
<td>Dissimilar vs. Similar Outgroup</td>
<td>-0.09 (0.39)</td>
<td>-0.25</td>
<td>.80</td>
</tr>
<tr>
<td>Prosocial Personality x Ingroup vs. Similar Outgroup</td>
<td>-0.43 (0.81)</td>
<td>-0.53</td>
<td>.60</td>
</tr>
<tr>
<td>Prosocial Personality x Dissimilar vs. Similar Outgroup</td>
<td>-1.76 (0.87)</td>
<td>-2.02</td>
<td>.05*</td>
</tr>
</tbody>
</table>

Model R²: 0.19  \( F = 5.45 \) .00***
Interaction 1 ΔR²: 0.00**  \( F = 0.28 \) .60
Interaction 2 ΔR²: 0.03*  \( F = 4.07 \) .05*
Interaction ΔR²: 0.05*  \( F = 3.55 \) .03*

*Note.* All coefficients are unstandardized and based on models with all primary variables entered.

* \( p < .05 
** \( p \leq .01 
*** \( p \leq .001 

![Figure 1. Prosocial Personality as a moderator of intergroup similarity effects on Facebook Support. Higher scores indicate increased prosocial personality.](image-url)
Table 6

*Regression Model Coefficients for Prosocial Personality by Similar and Dissimilar Outgroups vs. Ingroup on Prosocial Intent*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.49 (0.21)</td>
<td>21.66</td>
<td>.00</td>
</tr>
<tr>
<td>Prosocial Personality</td>
<td>1.23 (0.45)</td>
<td>2.74</td>
<td>.01**</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>0.04 (0.31)</td>
<td>0.13</td>
<td>.90</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>-0.14 (0.30)</td>
<td>-0.47</td>
<td>.64</td>
</tr>
<tr>
<td>Prosocial Personality x Similar Outgroup vs. Ingroup</td>
<td>0.69 (0.65)</td>
<td>1.06</td>
<td>.29</td>
</tr>
<tr>
<td>Prosocial Personality x Dissimilar Outgroup vs. Ingroup</td>
<td>-0.84 (0.68)</td>
<td>-1.22</td>
<td>.22</td>
</tr>
</tbody>
</table>

Model $R^2$ | 0.43 | $F = 5.26$ | .00***
Interaction 1 $\Delta R^2$ | 0.01** | $F = 1.13$ | .29
Interaction 2 $\Delta R^2$ | 0.01** | $F = 1.50$ | .22
Interaction $\Delta R^2$ | 0.03* | $F = 2.39$ | .10

*Note.* All coefficients are unstandardized and based on models with all primary variables entered.

* $p < .05$
** $p \leq .01$
*** $p \leq .001$
Table 7.

Regression Model Coefficients for Prosocial Personality by Ingroup and Dissimilar Outgroups vs. Similar Outgroup on Prosocial Intent

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.53 (0.22)</td>
<td>20.20</td>
<td>.00</td>
</tr>
<tr>
<td>Prosocial Personality</td>
<td>1.92 (0.47)</td>
<td>4.06</td>
<td>.00***</td>
</tr>
<tr>
<td>Ingroup vs. Similar Outgroup</td>
<td>-0.04 (0.31)</td>
<td>-0.90</td>
<td>.90</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Similar Outgroup</td>
<td>-0.18 (0.31)</td>
<td>-0.58</td>
<td>.57</td>
</tr>
<tr>
<td>Prosocial Personality x Ingroup vs. Similar Outgroup</td>
<td>-0.69 (0.65)</td>
<td>-1.06</td>
<td>.29</td>
</tr>
<tr>
<td>Prosocial Personality x Dissimilar Outgroup vs. Similar Outgroup</td>
<td>-1.53 (0.70)</td>
<td>-2.19</td>
<td>.03*</td>
</tr>
</tbody>
</table>

Model $R^2$ 0.43 $F = 5.26$ .00***
Interaction 1 $\Delta R^2$ 0.01** $F = 1.13$ .29
Interaction 2 $\Delta R^2$ 0.03* $F = 4.78$ .03*
Interaction $\Delta R^2$ 0.03* $F = 2.39$ .10

Note. All coefficients are unstandardized and based on models with all primary variables entered.

* $p < .05$
** $p \leq .01$
*** $p \leq .001$

Figure 2. Prosocial Personality as a moderator of intergroup similarity effects on Prosocial Intent. Higher scores indicate increased prosocial personality.
Civic Engagement. Civic Engagement moderated the relationship between group membership and Facebook Support. Civic Engagement had a significant direct effect on Facebook Support, which was qualified by significant Civic Engagement X Dissimilar Outgroup vs. Ingroup and Civic Engagement X Similar Outgroup vs. Ingroup interactions. These are shown in Figure 3. Simple slopes analysis indicated that there was a significant simple slope of Civic Engagement in the ingroup condition \( (p = .0001) \). Additionally, at low levels of civic engagement, there were significant differences between ingroup and dissimilar outgroup \( (p = .03) \), such that individuals exposed to the ingroup demonstrated higher Facebook support, relative to individuals in the similar or dissimilar outgroup conditions. Further, at high levels of civic engagement, there was a significant difference between ingroup and dissimilar outgroup \( (p = .01) \), where individuals exposed to the ingroup expressed more Facebook support relative to those exposed to the dissimilar outgroup condition. The regression coefficients and simple slopes of the interaction are presented in Tables 8 and 9 and Figure 3, respectively.

Results also revealed significant Civic Engagement X Dissimilar Outgroup versus Ingroup interaction and Civic Engagement X Dissimilar Outgroup vs. Similar Outgroup interactions. Civic engagement moderated the effect of intergroup similarity on Prosocial Intent. Simple slopes analysis showed that civic engagement predicted prosocial intent among those exposed to the ingroup \( (p = .0001) \) and similar outgroup \( (p = .0008) \) manipulations. Additionally, there was a significant difference between ingroup and dissimilar outgroup \( (p = .03) \) at low levels of civic engagement, such that individuals exposed to the ingroup demonstrated lower prosocial intent, relative to the dissimilar outgroup. The regression coefficients are presented in Tables 10 and 11, and simple slopes of the interaction in Figure 4. Table 8.
**Regression Model Coefficients for Civic Engagement by Similar and Dissimilar Outgroups vs. Ingroup on Facebook Support**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.85 (0.27)</td>
<td>14.37</td>
<td>.00</td>
</tr>
<tr>
<td>Civic Engagement</td>
<td>2.09 (0.51)</td>
<td>4.09</td>
<td>.00***</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>0.32 (0.39)</td>
<td>0.82</td>
<td>.41</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>-0.01 (0.38)</td>
<td>-0.03</td>
<td>.97</td>
</tr>
<tr>
<td>Civic Engagement x Similar Outgroup vs. Ingroup</td>
<td>-1.67 (0.71)</td>
<td>-2.35</td>
<td>.02*</td>
</tr>
<tr>
<td>Civic Engagement x Dissimilar Outgroup vs. Ingroup</td>
<td>-2.65 (0.73)</td>
<td>-3.62</td>
<td>.00***</td>
</tr>
</tbody>
</table>

Model $R^2$ 0.14
Interaction 1 $\Delta R^2$ 0.04* $F = 5.5$ .02*
Interaction 2 $\Delta R^2$ 0.10 $F = 13.10$ .00***
Interaction $\Delta R^2$ 0.10 $F = 6.74$ .00**

*Note.* All coefficients are unstandardized and based on models with all primary variables entered.

*p < .05
**p < .01
***p < .001
Table 9.

Regression Model Coefficients for Civic Engagement by Ingroup and Dissimilar Outgroup vs. Similar Outgroup on Facebook Support

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.17 (0.28)</td>
<td>14.79</td>
<td>.00</td>
</tr>
<tr>
<td>Civic Engagement</td>
<td>0.42 (0.50)</td>
<td>0.84</td>
<td>.40</td>
</tr>
<tr>
<td>Ingroup vs. Similar Outgroup</td>
<td>-0.32 (0.39)</td>
<td>-0.82</td>
<td>.41</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Similar Outgroup</td>
<td>-0.33 (0.39)</td>
<td>-0.84</td>
<td>.40</td>
</tr>
<tr>
<td>Civic Engagement x Ingroup vs. Similar Outgroup</td>
<td>1.67 (0.71)</td>
<td>2.35</td>
<td>.02*</td>
</tr>
<tr>
<td>Civic Engagement x Dissimilar Outgroup vs. Similar Outgroup</td>
<td>-0.98 (0.72)</td>
<td>-1.36</td>
<td>.18</td>
</tr>
</tbody>
</table>

Model R² 0.38  $F = 3.82$.00**
Interaction 1 ΔR² 0.04*  $F = 5.52$.02*
Interaction 2 ΔR² 0.01**  $F = 1.84$.18
Interaction ΔR² 0.10  $F = 6.74$.00**

Note. All coefficients are unstandardized and based on models with all primary variables entered.
* $p < .05$
** $p \leq .01$
*** $p \leq .001$

Figure 3. Civic engagement as a moderator of intergroup similarity effects on Facebook Support. Higher scores indicate increased civic engagement.
Table 10.

Regression Model Coefficients for Civic Engagement by Similar and Dissimilar Outgroups vs. Ingroup on Prosocial Intent

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.30 (0.21)</td>
<td>20.92</td>
<td>.00</td>
</tr>
<tr>
<td>Civic Engagement</td>
<td>1.57 (0.39)</td>
<td>4.00</td>
<td>.00***</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>0.40 (0.30)</td>
<td>1.35</td>
<td>.18</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>0.02 (0.30)</td>
<td>0.06</td>
<td>.95</td>
</tr>
<tr>
<td>Civic Engagement x Similar Outgroup vs. Ingroup</td>
<td>-0.25 (0.55)</td>
<td>-0.46</td>
<td>.64</td>
</tr>
<tr>
<td>Civic Engagement x Dissimilar Outgroup vs. Ingroup</td>
<td>-1.67 (0.56)</td>
<td>-2.97</td>
<td>.00*</td>
</tr>
</tbody>
</table>

Model R² | Interaction 1 ΔR² | Interaction 2 ΔR² | Interaction ΔR²
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.45</td>
<td>0.00**</td>
<td>0.06</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Note. All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05
** p ≤ .01
*** p ≤ .001
Table 11.

Regression Model Coefficients for Civic Engagement by Ingroup and Dissimilar Outgroups vs. Similar Outgroup on Prosocial Intent

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.71 (0.22)</td>
<td>21.74</td>
<td>.00</td>
</tr>
<tr>
<td>Civic Engagement</td>
<td>1.32 (0.38)</td>
<td>3.46</td>
<td>.00***</td>
</tr>
<tr>
<td>Ingroup vs. Similar Outgroup</td>
<td>-0.40 (0.30)</td>
<td>-1.35</td>
<td>.18</td>
</tr>
<tr>
<td>Dissimilar vs. Similar Outgroup</td>
<td>-0.39 (0.30)</td>
<td>-1.27</td>
<td>.20</td>
</tr>
<tr>
<td>Civic Engagement x Ingroup vs. Similar Outgroup</td>
<td>0.25 (0.55)</td>
<td>0.46</td>
<td>.64</td>
</tr>
<tr>
<td>Civic Engagement x Dissimilar vs. Similar Outgroup</td>
<td>-1.42 (0.56)</td>
<td>-2.56</td>
<td>.01**</td>
</tr>
</tbody>
</table>

Model R²  
Interaction 1 ΔR²  
Interaction 2 ΔR²  
Interaction ΔR²

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model R²</td>
<td>0.45</td>
<td>F = 5.96</td>
</tr>
<tr>
<td>Interaction 1 ΔR²</td>
<td>0.00**</td>
<td>F = 0.21</td>
</tr>
<tr>
<td>Interaction 2 ΔR²</td>
<td>0.04*</td>
<td>F = 6.54</td>
</tr>
<tr>
<td>Interaction ΔR²</td>
<td>0.07</td>
<td>F = 5.12</td>
</tr>
</tbody>
</table>

Note. All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05  
** p < .01  
*** p < .001

Figure 4. Civic Engagement as a moderator of intergroup similarity effects on Activist Intentions. Higher scores indicate increased civic engagement.
**Conservatism.** Conservatism moderated the effect of intergroup similarity on prosocial action, as evidenced by Conservatism X Similar Outgroup vs. Ingroup and Conservatism X Dissimilar vs. Similar Outgroup interactions. Simple slopes analysis showed that Conservatism predicted Facebook support among those exposed to the similar outgroup ($p = .03$) manipulation. Additionally, there was a significant difference between ingroup and similar outgroup ($p = .03$) conditions and between similar and dissimilar outgroups ($p = .0007$) at low levels of Conservatism, such that at low levels of Conservatism individuals exposed to the ingroup demonstrated more prosocial action, relative to the similar outgroup. Further, at high levels of Conservatism, there was a significant difference between the dissimilar and similar outgroup conditions ($p = .04$), such that individuals in exposed to the similar outgroup condition demonstrated fewer prosocial actions relative to the dissimilar outgroup. The regression coefficients are presented in Tables 12 and 13 and the simple slopes of the interactions are presented in Figure 5.
Table 12.

*Regression Model Coefficients for Conservatism by Similar and Dissimilar Outgroups vs. Ingroup on Prosocial Action.*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.07 (0.21)</td>
<td>4.92</td>
<td>.00</td>
</tr>
<tr>
<td>Conservatism</td>
<td>-0.35 (0.31)</td>
<td>-1.15</td>
<td>.25</td>
</tr>
<tr>
<td>Ingroup vs. Similar Outgroup</td>
<td>-0.27 (0.29)</td>
<td>-0.92</td>
<td>.36</td>
</tr>
<tr>
<td>Dissimilar vs. Similar Outgroup</td>
<td>0.35 (0.29)</td>
<td>1.24</td>
<td>.22</td>
</tr>
<tr>
<td>Conservatism x Ingroup vs. Similar Outgroup</td>
<td>0.86 (0.38)</td>
<td>2.24</td>
<td>.03*</td>
</tr>
<tr>
<td>Conservatism x Dissimilar vs. Similar Outgroup</td>
<td>0.17 (0.35)</td>
<td>0.49</td>
<td>.63</td>
</tr>
</tbody>
</table>

Model R²  
Interaction 1 ΔR²   0.05*  \( F = 5.03 \)  .03*
Interaction 2 ΔR²   0.00** \( F = 0.24 \)  .63
Interaction ΔR²  0.07 \( F = 3.65 \)  .03*

*Note.* All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05
** p < .01
*** p < .001
Table 13.

_Regression Model Coefficients for Conservatism by Ingroup and Dissimilar Outgroup vs. Similar Outgroup on Prosocial Action._

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.80 (0.20)</td>
<td>4.08</td>
<td>.00</td>
</tr>
<tr>
<td>Conservatism</td>
<td>0.50 (0.23)</td>
<td>2.20</td>
<td>.03*</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>0.27 (0.29)</td>
<td>0.92</td>
<td>.36</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>0.62 (0.27)</td>
<td>0.30</td>
<td>.02*</td>
</tr>
<tr>
<td>Conservatism x Similar Outgroup vs. Ingroup</td>
<td>-0.86 (0.38)</td>
<td>-2.24</td>
<td>.03*</td>
</tr>
<tr>
<td>Conservatism x Dissimilar Outgroup vs. Ingroup</td>
<td>-0.69 (0.29)</td>
<td>-2.40</td>
<td>.02*</td>
</tr>
</tbody>
</table>

Model R^2 0.37; F = 2.78, .02^*
Interaction 1 ΔR^2 0.05^*; F = 5.03, .03^*
Interaction 2 ΔR^2 0.06; F = 5.74, .02^*
Interaction ΔR^2 0.07; F = 3.65, .03^*

 Note. All coefficients are unstandardized and based on models with all primary variables entered.

*p < .05

**p < .01

***p < .001

Figure 5. _Conservatism as a moderator of intergroup similarity effects on Prosocial Action._
_Higher scores indicate increased conservatism._
Discussion

Intergroup Similarity

Intergroup similarity does have an impact on prosocial behaviour. The results support the hypotheses and the intergroup similarity of the target of help influences Facebook support, prosocial intent, and prosocial actions. There were also moderation effects. Specifically, prosocial personality moderated the effect of intergroup similarity on both Facebook support and prosocial intention. Civic engagement also moderated the effect of intergroup similarity on Facebook support as well as prosocial intent. Lastly, conservativism moderated the relationship between intergroup similarity and prosocial actions.

Hypotheses were presented regarding outgroup discrimination. On one hand, it was possible that individuals would recategorize similar outgroup members as being part of the ingroup as suggested by the common ingroup identity model (Gaertner, Mann, Murelle & Dovidio, 1989). On the other hand, it was also possible that distinctiveness threat could occur and result in more discrimination shown toward the similar outgroup. Distinctiveness threat theory (Jetten et al., 1997; Jetten et al., 2001) suggests that intergroup similarity can increase likelihood for discrimination, as the ingroup attempts to distance itself from the similar outgroup in order to increase differentiation from the outgroup. The findings of the present study suggest that the common ingroup identity model was more influential on participants’ actions than was distinctiveness threat.

Prosocial Personality. Providing online tokens of support, via clicking ‘like’ or ‘share’ on Facebook requires minimal to no real personal effort, cost, or risk. As such, I hypothesized that dissimilar outgroups would receive more token support than real support (via prosocial action). Although prosocial personality did moderate the effects of group manipulation on
Facebook support, this was only the case for ingroup and similar outgroup members. This finding supports the general hypothesis that individuals would display ingroup favouritism and outgroup discrimination toward dissimilar outgroup members, but not the hypothesis regarding how prosocial personality moderates the relationship between intergroup similarity and Facebook support. Increased familiarity with an outgroup may result in the perception that the cost of helping the outgroup is lower (Koschate et al., 2012). Further, this finding does support hypotheses relating to the common ingroup identity model, where it was hypothesized that the ingroup would be expanded to also include a similar outgroup member, but not a dissimilar outgroup member.

It was also expected that ingroup favouritism would result in more prosocial intentions expressed in the ingroup condition compared to the dissimilar outgroup condition. In line with this, individuals were more willing to provide aid to ingroup and similar outgroup members than to dissimilar outgroup members. This is consistent with our hypothesis that individuals would be less likely to help those who were least similar to his or her self.

Previous research by Finklestein and colleagues (2005) found that prosocial personality was a predictor of volunteer activity. I had hypothesized that prosocial personality would predict prosocial action; specifically, that for those individuals who are high in prosocial personality their prosocial behaviours would not be impacted by the intergroup similarity of the target recipient of aid. Considering the moderation effects found for prosocial personality on Facebook support and intergroup similarity, it was reasonable to expect the trend would continue and that prosocial personality would also moderate the effect of intergroup similarity on prosocial action. This was not the case, however, which partially supports the slacktivism hypothesis that endorsing requests for aid online does not predict future prosocial actions. Although not directly
assessed, possible explanations for this finding include the intention-behaviour gap and moral licensing, as discussed below.

Previous research has found there is often a strong inconsistency between intentions and behaviours. The intention behaviour gap refers to individuals frequently overestimating their future probability of participating in socially desirable behaviours (Ajzen, Brown & Carvajal, 2004). Ajzen and colleagues found that “this bias produces unrealistically high estimates of intentions to pay for a worthy cause as well as inconsistencies between intentions and actions in many other domains” (p. 1119). They found that in hypothetical situations, individuals overestimated the amount of money they would donate compared to behavioural situations. One reason for this may be that hypothetical situations (e.g. Facebook requests for support) may be less likely to stimulate associated risks of costs than does a behavioural situation (e.g. actually visiting a webpage to donate or sign a petition). However, Ajzen and colleagues found that when the intention-behaviour discrepancy was pointed out to participants that the incongruity diminished.

The concept of moral licensing, suggests that an individual may exempt his or herself from engaging in, or feeling responsible to engage in, prosocial behaviours based on past good deeds (Merritt, Effron & Monin, 2010). In relation to the current study, it is possible that some individuals felt that they had already done their part by way of providing token support online (Facebook support). Further investigation of whether the moral licensing moderated the relationship between intergroup similarity and prosocial behaviours is needed.

With regard to slacktivism, Kristofferson and colleagues (2014) found that public displays of token support (slacktivism) were less likely to result in subsequent helping actions. Bucy and Gregson (2001) proposed that online political involvement was more representative of
media participation than of political engagement. It may also be the case that Facebook support is more representative of media participation. Further research should evaluate the extent to which Facebook Support actually constitutes prosociality or media participation.

**Civic Engagement.** I hypothesized that civically engaged individuals would be more likely to display prosocial intentions and provide real world aid, and less likely to engage in slacktivism, particularly when directed toward the ingroup. As hypothesized, civic engagement moderated the effects of intergroup similarity on Facebook Support and Prosocial Intent, but not Prosocial Action. Civic engagement was correlated with prosocial action, but it did not moderate the relationship between intergroup similarity and prosocial action. Higher levels of civic engagement predicted increased Facebook support for individuals in the ingroup condition and increased Prosocial Intent for those in the ingroup and similar outgroup conditions.

Civic participation is associated with social interactions or social connectedness (Putnam, 2000). According to Putnam (2000), individuals who belong to formal or informal social networks are more likely to engage in helping acts than are secluded individuals. Individuals are more likely to be socially connected and involved with other individuals with whom they interact on a regular basis; this type of involvement is more likely to occur with ingroup members. This expectation is a function of relevance, opportunity, feasibility, as well as geographical location. For example, individuals are not eligible to participate in the voting process of other countries, unless they are dual citizens. In the case of dual citizenship, these individuals are likely to view themselves as being ingroup members of both countries.

It is important, however, to note that there are opportunities for individuals to civically engage in communities, including other countries, with which they are not considered members: providing humanitarian aid (in impoverished or disaster struck areas) or involvement with larger
global organizations (e.g. Habitat for Humanity, Red Cross, Doctors without Borders). Individuals who participate in these forms of civic actions are likely to do so based on expectations and opportunities presented within their social networks.

Self-efficacy has been found to play a significant role in how individuals approach goals, challenges, and prosocial expressions (Bandura, 1977; Caprara, Alessandri, & Eisenberg, 2012). When an individual believes in his or her own ability to succeed or accomplish a specific goal or task they are said to have high self-efficacy. Correspondingly, individuals who engage civically may be more likely to believe that their participation and involvement can result in real change, due to their past experiences of such (e.g. voting in an election or volunteering) (Manganelli, Lucidi, & Alivernini, 2014). Additionally, depending on the type of activity, individuals may feel that their ‘voice’ would have less impact in situations not relating to their ingroup, particularly dissimilar outgroups, as their ‘voice’ may not carry the same weight with outgroups as it does within the ingroup context, due to lack of membership (e.g. signing a petition or writing a letter to a member of government). However, this is less likely to be the case for involvement with global organizations such as Amnesty International or Greenpeace.

Furthermore, bias was shown in favour of the similar outgroup with regard to prosocial intentions. This too is reasonable given the closeness in proximity and similar cultural values between the United States and Canada, as suggested by the common ingroup identity model (Gaertner et al, 1989). Comparisons are often drawn between the two nations and both countries are frequently as being similar in relation to racial diversity, cultural and social norms, human rights, legal and political processes (Lalonde, 2002).

**Conservatism.** Low conservatism (liberalism) was associated with increased
prosocial action toward ingroup and dissimilar outgroup members, but not similar outgroup members. Conversely, at high levels of conservatism, more prosocial action was associated with the similar outgroup relative to the dissimilar outgroup. This result suggests that distinctiveness threat may play a role in prosocial expression (Jetten et al., 1997) of those low in conservativism. Skitka and Tetlock (1986) found that when there is no scarcity that liberal individuals are more likely to provide aid to all individuals\(^5\) than are conservative individuals. Various degrees of personal commitment, risk, and cost were provided in the behaviour options available, and there was no related scarcity.

Interestingly, and unexpectedly, prosocial action toward similar outgroup members increased at higher levels of conservatism (compared to lower levels). This result is in the opposite direction of what was hypothesized. I expected that prosocial action would decrease overall at high levels of conservatism. It is difficult to postulate what could have caused the unexpected result. Initial analyses suggested that the groups were equal prior to the intergroup similarity manipulation, so it is unlikely that this is due to unique differences of the participants within the similar outgroup condition. It may be the case that these individuals differed on dimensions not captured in the present study (e.g. religiosity), but this remains a question for future research.

**Slacktivism**

There was no relationship found between Facebook support and prosocial action, which is consistent with my hypotheses relating to slacktivism. Specifically, it was hypothesized that endorsements of Facebook posts via ‘liking’ or ‘sharing’ would be negatively related to prosocial

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5 Group membership was not differentiated by nationality as was the current study. Groups were defined as those deemed personally responsible for an illness (AIDS) and those who were not.
behaviours with real world consequences. However, it is important to note that this was a null finding, and therefore the results should be interpreted with caution.

Facebook support was moderately correlated with prosocial intent. The relationship between Facebook support and prosocial intent suggests that individuals who provide support via Facebook endorsement are also likely to express intentions to behave prosocially in offline contexts. This finding may imply that individuals who endorse Facebook requests for help or support by clicking ‘like’ or ‘share’ may do so with intention to behave prosocially in an offline context. However, intentions are not always reflected in behaviour, as is evidenced by the weak correlation between prosocial intent and prosocial action. Prosocial intent was weakly correlated with prosocial action. This finding was not unexpected; as previously discussed, intentions and behaviours are not necessarily congruent.

**Limitations & Future Directions**

Certain limitations of the research should be acknowledged. The population sampled was comprised of post-secondary students and therefore the results may not be broadly generalizable. Future studies could examine possible generational differences. The mean participant age for the current study was 22.32, which suggests that the majority of individuals sampled have grown up with the Internet being widely accessible and social media being a part of regular social communication. Compared to older generations, where home-based Internet access was less common and whose online activities predated social networks such as Facebook, there may be attitudinal differences with regard to online activism and behavioural differences in relation to how, when, and why online social networks are used.

Further, there were a disproportionate number of women included in the sample, as is common with populations sampled from post-secondary institutions. It is well established within
the literature that women tend to be more prosocial in nature than men are. Therefore, the unequal gender distribution may reduce the generalizability of the findings. Future studies, using a more balanced gender distribution, could examine possible gender differences in attitudes, beliefs, and participation in online activism.

It should also be noted that there was a floor effect for the prosocial action variable. Within each experimental condition, there were a limited number of “yes” responses to the four prosocial actions with real world consequences options. Due to the low “yes” response rate, I was unable to analyse the data as originally intended (binary logistic regression). Instead, a new variable was created to reflect the participants’ total number out of four possible prosocial actions (signing a petition, donating, volunteering, and fundraising). Subsequently, the data were analysed using a moderated multiple regression.

A low response rate to performing real behaviours, however, is not unusual. As previously discussed, there is a discrepancy between intentions and behaviour. It is possible that the low “yes” response rates are symptomatic of the slacktivist phenomenon; however, without supporting statistical analyses this is speculation. Future studies can employ a different research design that would allow for the disparity between costless, symbolic expressions of support online and behaviours with real world consequences to be statistically examined, or a statistical index of the discrepancy could be developed.

The data collection was conducted entirely online, which allowed for the investigation of online prosocial behaviour, but may have reduced the accuracy of the measurement of real world behaviours. Due to confidentiality and anonymity requirements, it was not possible to capture whether participants actually engaged in the intended behaviour after selecting ‘yes’. Participants may have visited the provided websites, but may not have acted upon the
information therein. It was not possible to capture whether a donation was made, a petition signed, or whether an application to volunteer or participate in a fundraising event was completed. Future studies could replicate the above paradigm in a laboratory setting, and include providing remuneration to participants that can be donated, in whole or in part, at the end of the study. Additionally, a laboratory study could verify whether participants followed-through in future activities such as volunteering and fundraising.

Research on actual intergroup contact (Allport, 1954; Pettigrew & Tropp, 2006) and imagined intergroup contact (Crisp, Stathi, Turner, & Husnu, 2009; Miles & Crisp, 2014) suggest that contact between groups can decrease prejudice. Online interactions may be able to create neutral or positive interactions that result in diminished intolerance or discrimination toward outgroup members. Future studies could manipulate varying forms of contact, both real and imagined, in both online and offline contexts, so as to examine whether the ingroup bias with regard to providing aid remains.

**Conclusion**

The intergroup similarity of a target can affect prosocial responding even of individuals who are particularly prosocially oriented. A simple change in the national identity of a target recipient of aid resulted in a decrease in helping behaviours toward outgroup members. Often pleas for help from charities or non-profit organizations focus on the differences between those who are in need and those who can help, with emphasis often placed on how the target recipients have a lower quality of life, reduced or restricted access to necessary services or products, or lack the ability to improve his or her own condition or status. It stands to reason that evoking empathy should lead to an increase in prosocial behaviours. In contrast, the present findings suggest the perceived intergroup similarity of the target other may affect whether help is given.
Therefore, rather than focusing of differences in attempt in evoke an empathic response, charitable and non-profit organizations may find it beneficial to draw attention to the similarities between potential donors and recipients of aid, so as to create a sense of ‘us’ as opposed to ‘them’. By emphasizing the similarities between those being asked to help and those in need may improve the likelihood to receive help by way of donations or acts of service.

Charitable and non-profit organizations may find it beneficial to alter their marketing campaigns based on the demographics of the intended audience. Conservative individuals tend to be more individualistic than liberal individuals are, and less likely to provide aid when a personal risk or loss is associated. As conservatism was found to moderate the relationship between intergroup similarity and prosocial behaviours, it may be beneficial to emphasize personal benefits such as accentuate that tax receipts are given for monetary donations or offer to collect clothing and household items that are in good condition and no longer wanted, at no cost to the individual. For conservative individuals, highlighting the emotional benefits he or she would receive from helping, may further underscore the personal benefits of providing aid.

Civic Engagement is an important predictor of prosocial behaviour. Individuals with higher degrees of civic engagement were still prone to ingroup favouritism where Facebook support and future prosocial intentions were concerned. Federal, provincial, and local governments as well as community groups can use this findings of this study to aid in campaign design and promotion, by using techniques to highlight similarities, as opposed to disparities, between groups to decrease outgroup bias in order increase civic involvement outside of the ingroup.

Educational programs could incorporate opportunities associated with outgroup members as opposed to ingroup members. Civic engagement has been an increasing focus
within the education system over recent decades, with the aim to “encourage students to develop awareness and understanding of civic responsibility and of the role they can play and the contributions they can make in supporting and strengthening their communities” (Ontario Ministry of Education, n.d.). Ontario secondary schools require students to complete a minimum of 40 number of community service hours in order to obtain their diploma (Ontario Ministry of Education, n.d.). These opportunities often involve volunteering within the community, such as helping to care for animals at a local shelter, visiting with senior citizens in care facilities, or cleaning up community parks. There are also civic engagement opportunities available outside of the local (ingroup) regions such as writing letters to fight for human rights (e.g. Amnesty International: http://write.amnestyusa.org), fundraising for overseas efforts (e.g. the Deworming Haiti project: http://www.plantingpeace.org/deworming), or creating school supply shoeboxes to be sent to children in need (http://www.projectshoebox.org/pack-a-shoebox). These are opportunities to promote prosocial acts toward outgroup members both similar and dissimilar. As societies and social networks (both physical and digital) expand and develop, so do the opportunities for people of varying backgrounds, racial, social and cultural, to interact more than ever before. Online social networks, such as Facebook, Twitter, and Instagram may be able to contribute to the reduction of prejudice and discrimination, by providing modes of intergroup contact. Moreover, these online social networks have the potential to reach an astonishing number of people. The next step is harnessing the power of social media to increase inclusion in one’s ingroup or acceptance of outgroups, so as to promote prosocial behaviour not only to those similar to us but those who are different.
References


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10.1348/014466602321149902


10.1111/j.1751-9004.2010.00263.x


Appendix A: Vignette

Figure 6. Sample vignette from the Ingroup condition.
Appendix B: Data Screening

There were three cases identified as outliers on Facebook Self-Monitoring. Of the responses, two cases scored very high on the FSM, which is indicative of increased use of self-monitoring strategies on Facebook. This is not considered unusual, and is of interest as it was hypothesized that individuals who are high in FSM may be more likely to engage in slacktivism. Based on the specific individual responses item responses both cases were considered valid and, thus, were not removed from the analysis. Conversely, the third case identified as an outlier, contained inconsistent responses and was removed and excluded from analyses.

For the Conservatism-Liberalism scale, three cases were identified as outliers. One participant’s responses were indicative of an individual with strong conservative beliefs. Conversely, the item responses of the other two cases were consistent with strong liberal beliefs. While these scores did differ by more than 1.5 SD from the responses provided by other participants, that does not necessarily invalidate them, and therefore were considered valid data and were not removed from the analyses.

Of the two cases identified as outliers on the exploratory variable, Belief in a Just World, one was consistent with a heightened belief in a just world, however this case was previously excluded due to an inconsistent response style on the Facebook Self-Monitoring scale, while the other case contained inconsistent and contradictory responses and thus was removed from future analyses.
Appendix C: Personal Altruism.

The Personal Altruism Level Scale (PAL). The PAL is a 16-item self-report inventory where responses are measured on a 5-point Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’ (Tankersley, 2009). Unlike other self-report altruism inventories, the questions of the PAL are more suited to young adults who are either university students or university employees, which is fitting, given the population from with the sample will be drawn. Sample items from the scale include: “I would stay up late before a test to help my friend proof a term paper”, “I would spend a Friday night comforting my friend who has suffered a breakup”, and “I would help a stranger carry a heavy object”. The PAL is highly correlated with Rushton, Chrisjohn, and Fekken’s (1981) SRAS (Self-Report Altruism Scale) at 0.77, and had a reliability coefficient of 0.78. Personal Altruism did not moderate effects of intergroup similarity on Facebook Support, Prosocial Intent, or Prosocial Action.
Appendix D: Self-Monitoring

Self-monitoring occurs when an individual controls his or her observable behaviours so that it is perceived by others positively or as being socially acceptable or desirable (Snyder, 1974). Individuals who are high in self-monitoring are concerned with how others perceive them. Conversely, individuals who score low in self-monitoring are less concerned with how others view them. Observable behaviours of low self-monitors are more likely to be consistent, whereas the observable behaviours of high self-monitors are more likely to change due to how they believe others may perceive them based on said actions. Individuals who score high on self-monitoring may be more likely to engage in slacktivist behaviours online in attempt to be perceived as being more prosocial than is the case.

The Facebook Self-Monitoring (Abell & Brewer, 2014) scale was utilized to gain information regarding how the participants self-manage on the social networking website. This scale was expected to provide particularly useful information due to its association with a popular social networking website, a forum for which slacktivism is more likely to occur. In this 16-item scale, participants respond to statements dichotomously (true/false). The scale includes statements such as “When I am uncertain of what to put as a status update, I look at the updates of my Facebook friends.” and “I often update my status saying I am doing something exciting even though this is not true.”. The scale had a poor reliability coefficient of 0.52. Facebook Self-Monitoring did not moderate effects of intergroup similarity on Facebook Support, Prosocial Intent, or Prosocial Action.
Appendix E: Social Dominance Orientation

Social Dominance Orientation is an indicator of preference (or lack of) for inequality between groups (Pratto, Sidanius & Malle, 1994). Individuals with a high social dominance orientation score tend to be more prejudiced, more ethnocentric, and less empathic toward others, particularly those deemed to be of lower status. When measuring attitudes and behaviours toward outgroup members, a measure of an individual’s SDO is of importance. An individual who scores high on SDO, was expected to be more likely to engage in slacktivism and less likely to engage in real-world prosocial actions toward outgroups than those with low SDO scores.

In order to determine participants’ social dominance orientation, Pratto et al.’s (1994) Social Dominance Orientation scale was used. The scale employs a 7-point scale ranging from extremely negative to extremely positive to measure participant’s responses to 14 items, with an alpha reliability coefficient of 0.81. Sample items include: “We should strive to make incomes as equal as possible”, “Group equality should be our ideal”, and “It's OK if some groups have more of a chance in life than others”.

Social Dominance Orientation moderated the effect of intergroup similarity on Prosocial Action. There were significant Social Dominance Orientation X Similar Outgroup vs. Ingroup and Social Dominance Orientation X Dissimilar vs. Similar Outgroup interactions. Simple slopes analysis showed that social dominance orientation predicted prosocial action among those exposed to the similar outgroup \( (p = .049) \) manipulation. The regression coefficients are presented in Tables 14 and 15. The simple slopes of the interaction are presented in Figure 6.
**Table 14**

*Regression Model Coefficients for Social Dominance Orientation by Similar and Dissimilar Outgroups vs. Ingroup on Prosocial Action.*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.08 (0.21)</td>
<td>5.07</td>
<td>.00</td>
</tr>
<tr>
<td>Social Dominance Orientation</td>
<td>-0.51 (0.28)</td>
<td>-1.81</td>
<td>.07</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>-0.35 (0.29)</td>
<td>-1.22</td>
<td>.22</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>-0.36 (0.28)</td>
<td>1.27</td>
<td>.21</td>
</tr>
<tr>
<td>Social Dominance Orientation x Similar Outgroup vs. Ingroup</td>
<td>-0.95 (0.36)</td>
<td>2.65</td>
<td>.01**</td>
</tr>
<tr>
<td>Social Dominance Orientation x Dissimilar Outgroup vs. Ingroup</td>
<td>0.13 (0.37)</td>
<td>0.35</td>
<td>.73</td>
</tr>
</tbody>
</table>

**Model R²**

<table>
<thead>
<tr>
<th>Interaction 1 ΔR²</th>
<th>F = 3.36</th>
<th>.01**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction 2 ΔR²</td>
<td>F = 7.04</td>
<td>.01**</td>
</tr>
<tr>
<td>Interaction ΔR²</td>
<td>F = 0.12</td>
<td>.73</td>
</tr>
</tbody>
</table>

**Note.** All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05
** p < .01
*** p < .001
Table 15

Regression Model Coefficients for Social Dominance Orientation by Ingroup and Dissimilar Outgroups vs. Similar Outgroup on Prosocial Action.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.73 (0.19)</td>
<td>3.80</td>
<td>.00***</td>
</tr>
<tr>
<td>Social Dominance Orientation</td>
<td>0.43 (0.22)</td>
<td>1.99</td>
<td>.05*</td>
</tr>
<tr>
<td>Ingroup vs. Similar Outgroup</td>
<td>0.35 (0.29)</td>
<td>1.23</td>
<td>.22</td>
</tr>
<tr>
<td>Dissimilar vs. Similar Outgroup</td>
<td>0.71 (0.27)</td>
<td>2.68</td>
<td>.01**</td>
</tr>
<tr>
<td>Social Dominance Orientation x Ingroup vs. Similar Outgroup</td>
<td>-0.95 (0.36)</td>
<td>-2.65</td>
<td>.01**</td>
</tr>
<tr>
<td>Social Dominance Orientation x Dissimilar vs. Similar Outgroup</td>
<td>-0.82 (0.32)</td>
<td>-2.59</td>
<td>.01</td>
</tr>
<tr>
<td>Model R²</td>
<td>0.40</td>
<td>F =   3.36</td>
<td>.01**</td>
</tr>
<tr>
<td>Interaction 1 ΔR²</td>
<td>0.07</td>
<td>F =   7.01</td>
<td>.01**</td>
</tr>
<tr>
<td>Interaction 2 ΔR²</td>
<td>0.06</td>
<td>F =   6.65</td>
<td>.01**</td>
</tr>
<tr>
<td>Interaction ΔR²</td>
<td>0.09</td>
<td>F =   4.83</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05
** p < .01
*** p < .001
Figure 7.  *Social Dominance Orientation as a moderator of intergroup similarity effects on Prosocial Action.* Higher scores indicated increased social dominance orientation.
Appendix F: Belief in a Just World

The degree to which individuals believe that there is a sense of order, stability, or universal justice – simply stated ‘individuals get what they deserve’ may play a role in how willing an individual is to provide support or aid to a target other. Often a having a strong belief in a just world concept can lead individuals to deem that the misfortunes of others is warranted, or justified, and that those who deserve help will receive it. This construct was hypothesized to relate to an individual’s expression of altruistic behaviours outside of their ingroup, which in turn, as we hypothesized will be related to slacktivist expressions. A high degree of Belief in a Just world was hypothesized to be associated with a reduced likelihood of providing real-life aid to outgroup members.

Lambert, Burroughs and Nguyen’s (1999) Belief in a Just World scale includes 18-items, such as: “In my life, justice always prevails”, “I think that in general there is justice in the world”, and “By and large, people get what they deserve”. Items are rated on a 6-point Likert scale, ranging from strong disagree to strongly agree. The scale had good reliability, with an alpha of 0.82.

Belief in a Just World moderated the effects of the intergroup similarity manipulation on Facebook support for individuals exposed to the Dissimilar Outgroup manipulation, as evidenced by Belief in a Just World X Dissimilar Outgroup vs. Ingroup and Belief in a Just World X Dissimilar Outgroup vs. Similar Outgroup interactions. Simple slopes analysis showed that belief in a just world predicted Facebook support among those exposed to the dissimilar outgroup ($p = .005$) manipulation. Interestingly, individuals with high levels of belief in a just world, reported increased likelihood to provide Facebook support to a dissimilar outgroup target,
relative to those exposed to ingroup or similar outgroup targets. The regression coefficients and simple slopes of the interaction are presented in Tables 16 and 17, and Figure 7, respectively.

Table 16

**Regression Model Coefficients for Belief in a Just World by Similar and Dissimilar Outgroups vs. Ingroup on Facebook Support**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.02 (0.28)</td>
<td>14.56</td>
<td>.00</td>
</tr>
<tr>
<td>Belief in a Just World</td>
<td>0.14 (0.37)</td>
<td>0.37</td>
<td>.71</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>0.15 (0.40)</td>
<td>0.40</td>
<td>.71</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Ingroup</td>
<td>-0.12 (0.39)</td>
<td>0.39</td>
<td>.77</td>
</tr>
<tr>
<td>Belief in a Just World x Similar Outgroup vs. Ingroup</td>
<td>-0.09 (0.58)</td>
<td>-0.16</td>
<td>.87</td>
</tr>
<tr>
<td>Belief in a Just World x Dissimilar Outgroup vs. Ingroup</td>
<td>1.31 (0.62)</td>
<td>2.11</td>
<td>.04*</td>
</tr>
</tbody>
</table>

Model $R^2$                                      | 0.27             | $F = 1.81$ | .12  |
Interaction 1 $\Delta R^2$                      | 0.00**           | $F = 0.27$ | .87  |
Interaction 2 $\Delta R^2$                      | 0.04*            | $F = 4.47$ | .04* |
Interaction $\Delta R^2$                        | 0.04*            | $F = 2.76$ | .08  |

*Note.* All coefficients are unstandardized and based on models with all primary variables entered.

* $p < .05$

** $p < .01$

*** $p < .001$
Table 17

*Regression Model Coefficients for Belief in a Just World by Ingroup and Dissimilar Outgroups vs. Similar Outgroup on Facebook Support*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (se)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.17 (0.29)</td>
<td>14.17</td>
<td>.00</td>
</tr>
<tr>
<td>Belief in a Just World</td>
<td>0.40 (0.45)</td>
<td>0.09</td>
<td>.92</td>
</tr>
<tr>
<td>Similar Outgroup vs. Ingroup</td>
<td>-0.15 (0.40)</td>
<td>-0.37</td>
<td>.71</td>
</tr>
<tr>
<td>Dissimilar Outgroup vs. Similar Outgroup</td>
<td>-0.27 (0.41)</td>
<td>-0.66</td>
<td>.51</td>
</tr>
<tr>
<td>Belief in a Just World x Ingroup vs. Similar Outgroup</td>
<td>-0.09 (0.58)</td>
<td>0.16</td>
<td>.87</td>
</tr>
<tr>
<td>Belief in a Just World x Dissimilar Outgroup vs.</td>
<td>1.41 (0.67)</td>
<td>2.09</td>
<td>.04*</td>
</tr>
<tr>
<td>Similar Outgroup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model R²</td>
<td>0.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction 1 ΔR²</td>
<td>0.00***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction 2 ΔR²</td>
<td>0.04*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction ΔR²</td>
<td>0.04*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* All coefficients are unstandardized and based on models with all primary variables entered.

* p < .05  
** p < .01  
*** p < .001
Figure 8. *Belief in a Just World as a moderator of intergroup similarity effects on Facebook Support.* Higher scores indicated increased belief in a just world.
Appendix G: Perceived Similarity

It has been well established in the literature that individuals tend to favour the ingroup. This is, in part, due to the perceived similarity between the self and other members of the ingroup, even if the ingroup member is not known. The perceived intergroup similarity of the target individual may provide important information regarding whether the target other will receive aid. Previous research has assessed perceived intergroup similarity measures in order to examine whether the degree of overlap (similarity) between the self and a target other had an impact on attitudes and beliefs toward the target other (Haji & Lalonde, 2008). Aron, Aron, and Smollan’s (1992) Inclusion of other in the self scale (IOS) presents participants with seven Venn diagram images in varying degrees of overlap, where more overlap indicates more similarity. Participants indicate the degree of similarity by selecting the Venn diagram that best matches the degree of overlap they feel exists between themselves and the target individuals. The measure has a high test-retest reliability of .83.

For the currently study, it was expected that perceived similarity would influence the amount and type of support a target other receives. Specifically, that the less similarity the participant perceives between his or her self and the target recipient of aid, the more likely they may be to engage in slacktivism. Perceived Similarity did not moderate effects of intergroup similarity on Facebook Support, Prosocial Intent, or Prosocial Action, nor were there significant difference between the three conditions, however, the trend was in the right direction: ingroup (\(M = 3.38, SD = 1.90\)), similar outgroup (\(M = 2.65, SD = 1.57\)), and dissimilar outgroup (\(M = 2.60, SD = 1.83\)).