Supplementary Material

Intergroup Contact, Outgroup Knowledge and Advantaged Group Collective Action: Can Who You Know and What You Know Promote Social Change?

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# Supplementary Data

## Outlier and Ethnicity Filter Summary

The outlier filter removed any participants with responses that exceeded |3| standard deviations from the mean on any given variable. When the outlier filter was applied, the following differences from those reported in the main text were observed. When the filter was applied to Sample 1 (Canada), in the contact quality and normative collective action model with morality represented as RWA, morality (RWA) lost statistical significance and was not directly associated with normative collective action, *p* = .10. When the outlier filter was applied to Sample 2 (the U.S.), in the self-report knowledge and normative collective action model with morality represented by SDO, self-report knowledge lost statistical significance and is not directly associated with efficacy, *p* = .65.

The White filter removed any participants who described their ethnicity as anything other than only White. When the White filter was applied, the following differences from those reported in the main text were observed. When the outlier filter was applied to Sample 1 (Canada), in the cross-group friendship and non-normative collective action model with morality represented by RWA, morality (RWA) lost statistical significance and is not directly associated with non-normative collective action, *p* = .06. In the contact quantity and non-normative collective action models with morality represented by RWA, morality (RWA) lost statistical significance and is not directly associated with non-normative collective action, *p* = .06. In sample 2 (the U.S.) all relationships remained significant where *p* ≤ .05 when the White filter was applied.

## Measures

### Sample 1 (Canada)

#### Demographics

1. What is your age?
2. What is your ethnicity?

Arab

Black

Chinese

Filipino

Indigenous Peoples in Canada (e.g. First Nations, Metis, Inuit)

Japanese

Korean

Latin American

South Asian (e.g. Indian, Pakistani, Sri Lankan, Bangladeshi)

Southeast Asian (e.g. Vietnamese, Cambodian, Laotian, Thai)

West Asian (e.g. Afghan, Iranian)

White/ European

Other (please specify)\_\_\_\_\_\_

1. What is your gender?

Male

Female

Non-binary

There isn’t have an option that applies to me, I identify as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Where did you grow up?
2. What country do you live in currently?

#### Morality (social dominance orientation)

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, *109*(6), 1003–1028. https://doi.org/10.1037/pspi0000033

#### Morality (Right-wing authoritarianism)

Zakrisson, I. (2005). Construction of a short version of the right-wing authoritarianism (RWA) scale. *Personality and Individual Differences*, *39*, 863–872. https://doi.org/10.1016/j.paid.2005.02.026

#### Intergroup contact

##### General quantity

Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*(6), 700–710. https://doi.org/10.1177/0146167293196005

*Note:* We used the words “Indigenous people” as the contact group.

##### General Quality

Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*(6), 700–710. https://doi.org/10.1177/0146167293196005

*Note:* We used the words “Indigenous people” as the contact group.

##### Cross-Group Friendship

Smith, T. W. (2002). Measuring inter-racial friendships. *Social Science Research*, *31*(4), 576–593. https://doi.org/10.1016/S0049-089X(02)00015-7

*Note:* We used Smith’s (2002), Network approach and asked the following questions listed below about each friend indicated.

1. [friend’s initial/ nickname]’s gender:

* Male
* Female
* My friend identifies as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. [friend’s initial/ nickname] is a member of the following ethnic group(s):

* Arab
* Black
* Chinese
* Filipino
* Indigenous Peoples of Canada (e.g. First Nations, Metis, Inuit)
* Japanese
* Korean
* Latin American
* South Asian (e.g. Indian, Pakistani, Sri Lankan, Bangladeshi)
* Southeast Asian (e.g. Vietnamese, Cambodian, Laotian, Thai)
* West Asian (e.g. Afghan, Iranian)
* White/ European
* Other (please specify)\_\_\_\_\_\_

1. Did you ever witness [friend’s name/nickname] be discriminated against due to their membership in the group [survey software will insert answer to question 2 above]?
2. Did [friend’s name/nickname] ever share an experience of discrimination with you due to their membership in the group [survey software will insert answer to question 2 above]??
3. How long have you been friends with this person (in years)? \_\_\_\_\_\_
4. Please use the following thermometer to indicate your overall attitude toward [friend’s name/ nickname]

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Extremely unfavourable 0-10o | 11-20o | 21-30o | 31-40o | 41-50o | 51-60o | 61-70o | 71-80o | 81-90o | Extremely favourable 91-1000 |
| Friend’s name | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |

1. How close do you feel to [friend’s name/nickname]?” 1 (Not at all) to 7 (Very much).

#### Knowledge

##### Self-report

Zagefka, H., González, R., Brown, R., Lay, S., Manzi, J., & Didier, N. (2017). To know you is to love you: Effects of intergroup contact and knowledge on intergroup anxiety and prejudice among indigenous Chileans. *International Journal of Psychology*, *52*(4), 308–315. https://doi.org/10.1002/ijop.12229

Mansouri, F., & Vergani, M. (2018). Intercultural contact, knowledge of Islam, and prejudice against muslims in Australia. *International Journal of Intercultural Relations*, *66*, 85–94. https://doi.org/10.1016/j.ijintrel.2018.07.001

*Note*: We used Zagefka et al.’s Study 1 Intergroup knowledge measure, replacing the words, “non-Indigenous” with “Indigenous people.”

##### Factual Knowledge

Jiang, S., Postovit, L., Cattaneo, A., Binder, E. B., & Aitchison, K. J. (2019). Epigenetic modifications in stress response genes associated With childhood trauma. *Frontiers in Psychiatry*, *10*. https://doi.org/10.3389/fpsyt.2019.00808

MacDonald, N. E., Stanwick, R., & Lynk, A. (2014). Canada’s shameful history of nutrition research on residential school children: The need for strong medical ethics in Aboriginal health research. *Paediatrics & Child Health*, *19*(2), 64.

Mumford, J. R. (2007). Why was Louis Riel, a United States citizen, hanged as a Canadian traitor in 1885? *Canadian Historical Review*, *88*(2), 237–262. https://doi.org/10.3138/chr.88.2.237

Neufeld, K. H. S., Starzyk, K. B., Boese, G. D., Efimoff, I. H., & Wright, S. (2022). “The more you know”: Critical historical knowledge about Indian Residential Schools increases non-Indigenous Canadians’ empathy for Indigenous Peoples. *Political Psychology*, *43*(4), 617–633. https://doi.org/10.1111/pops.12783

Quenneville, G., & Warick, J. (2018, February 10). Shouts of “murderer” in courtroom after Gerald Stanley acquitted in Colten Boushie shooting. *CBC*. https://www.cbc.ca/news/canada/saskatoon/gerald-stanley-colten-boushie-verdict-1.4526313

Truth and Reconciliation Commission of Canada. (2015). *Canada’s Residential Schools: The History, Part 1, Origins to 1939* [The Final Report of the Truth and Reconciliation Commission of Canada]. Truth and Reconciliation Commission of Canada; JSTOR. https://doi.org/10.2307/j.ctt19rm9v4

Voyageur, C. (2011). Out in the open: Elected female leadership in Canada’s First Nations community. *Canadian Review of Sociology/Revue Canadienne de Sociologie*, *48*(1), 67–85. https://doi.org/10.1111/j.1755-618X.2011.01250.x

*Note:* We asked, “People’s knowledge of historical events can vary. With that in mind please rate how much you believe a statement is true on a scale ranging from Definitely false (1) to Definitely true (5).”

1. Indigenous children were forced to attend Indian Residential Schools frequently located in remote areas and where the most common cause of death was tuberculosis.
2. Indigenous women who were “Status Indian” under their treaty rights, were not allowed full Canadian citizenship or allowed to vote until 1951.
3. Less than 1000 Indigenous children attended Canadian government funded Indian Residential Schools during a fifty year period where physical and sexual abuse was documented.
4. Louis Riel, the Metis leader who was central in joining Manitoba to confederation was captured by the Canadian Government and executed for high treason.
5. Please choose Definitely false 1 for this question.
6. Between 1942-1952, the Department of Indian Affairs performed nutritional experiments on Indigenous children in six Indian Residential Schools, resulting in the death of some of the children.
7. Twenty-two year old First Nations Colten Boushie was shot point blank for trespassing and alleged theft. The man acquitted by an all-White jury, never denied fatally shooting Boushie.
8. If an Indigenous Grandma experienced trauma (e.g., violence, sexual assault) in her childhood, it may persistently reduce her ability to lower stress hormones (i.e., cortisol) in her blood, meaning she remains chronically stressed throughout her lifetime. These physiological changes can be passed down to her children and her grandchildren even if they do not experience trauma themselves.

##### Perception of Isolated Racism

Adams, G., Tormala, T. T., & O’Brien, L. T. (2006). The effect of self-affirmation on perception of racism. *Journal of Experimental Social Psychology*, *42*(5), 616–626. https://doi.org/10.1016/j.jesp.2005.11.001

Nelson, J. C. (2010). *The role of knowledge of racist history and identity in perception of racism* [Doctoral Dissertation, University of Kansas]. https://kuscholarworks.ku.edu/handle/1808/7741

*Note:* We used Nelson’s measure found in Appendix B, part B. We replaced all the words “person of color” and “African American,” with “Indigenous person.” For the last item we used the name “Mary Maasewigan (a First Nations woman)” instead of “Lashandra Jenkins.”

##### Perception of Systemic Racism

Government of Canada, S. C. (2018, June 21). *Aboriginal Population Profile, 2016 Census*. https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/abpopprof/index.cfm?Lang=E

Government of Canada, S. C. (2022). *Adult custody admissions to correctional services by Indigenous identity* [Statistics]. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3510001601

Nelson, J. C. (2010). *The role of knowledge of racist history and identity in perception of racism* [Doctoral Dissertation, University of Kansas]. https://kuscholarworks.ku.edu/handle/1808/7741

Paradies, Y. C., & Cunningham, J. (2008). Development and validation of the Measure of Indigenous Racism Experiences (MIRE). *International Journal for Equity in Health*, *7*(1), 9. https://doi.org/10.1186/1475-9276-7-9

Public Health Agency of Canada. (2018). *Key Health Inequalities in Canada: Executive Summary* [Research]. Public Health Agency of Canada. https://www.canada.ca/en/public-health/services/publications/science-research-data/key-health-inequalities-canada-national-portrait-executive-summary.html

*Note:* The first three items and stem question are adapted from Nelson (2010) and we created the remaining items. We used the phrase ‘less opportunities’ rather than the grammatically correct ‘fewer opportunities’ as the former was thought to be more easily understood by respondents.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Not at all |  |  | Somewhat |  |  | Certainly |

1. The practice of racial profiling—using only information about race to make a decision, for example police searching more Indigenous youth than non-Indigenous youth in public spaces.
2. The relatively small number of Indigenous people in positions of influence such as politicians, judges, university professors or celebrities.
3. The high rate of poverty of Indigenous people in Canada.
4. Indigenous people make up 4.9% of the total of the overall Canadian population however Indigenous people make up 32% of the federal prison population.
5. Indigenous children made up 7.7% of the total child population of Canada and Indigenous children make up roughly 52.2% of the total foster care population in Canada.
6. More Indigenous infants die per year compared to non-Indigenous infants in Canada.
7. Indigenous people have less opportunities than other Canadians.
8. Non-Indigenous Canadians think that Indigenous people are better off because they get special treatment from the government.
9. There is hardly ever anything good about Indigenous people in the media (TV, radio, newspapers, etc.).

#### Social Identification

Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, *3*(3), 239–262. https://doi.org/10.1080/13576500444000047

Nassar, L. (2021). *Psychological barriers and motivators of normative and non-normative collective action* [Unpublished doctoral dissertation]. Toronto Metropolitan University.

Thomas, E. F., Smith, L. G. E., McGarty, C., Reese, G., Kende, A., Bliuc, A., Curtin, N., & Spears, R. (2019). When and how social movements mobilize action within and across nations to promote solidarity with refugees. *European Journal of Social Psychology*, *49*(2), 213–229. https://doi.org/10.1002/ejsp.2380

*Note:* We adapted these from Thomas (2019) and Nassar (2021). We asked “Please rate each statement using the scale below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

1. I see myself as a supporter of efforts to ensure that Indigenous peoples are treated fairly and compensated for past actions.
2. I am pleased to be a supporter of efforts to ensure that Indigenous peoples are treated fairly and compensated for past actions.
3. I identify with other supporters of efforts to ensure that Indigenous peoples are treated fairly and compensated for past actions.
4. I identify as an ally to the First Nations, Inuit, and Metis peoples

#### Group Efficacy

Nassar, L. (2021). *Psychological barriers and motivators of normative and non-normative collective action* [Unpublished doctoral dissertation]. Toronto Metropolitan University.

*Note:* We used the words Indigenous people to describe the group in these items

#### Anger at Injustice

Selvanathan, H. P., Techakesari, P., Tropp, L. R., & Barlow, F. K. (2018). Whites for racial justice: How contact with Black Americans predicts support for collective action among White Americans. *Group Processes & Intergroup Relations*, *21*(6), 893–912. https://doi.org/10.1177/1368430217690908

*Note:* We used the 10 items from study 3 that measured anger. We asked, “When thinking about the injustice that Indigenous peoples in Canada face/ have faced what extent does it make you feel…”

#### Normative Collective Action

Imhoff, R., Dieterle, L., & Lamberty, P. (2021). Resolving the puzzle of conspiracy worldview and political activism: Belief in secret plots decreases normative but increases nonnormative political engagement. *Social Psychological and Personality Science*, *12*(1), 71–79. https://doi.org/10.1177/1948550619896491

*Note*: We asked participants, “To what extent would you engage in these behaviours to reduce the unjust treatment of Indigenous people (e.g., residential schools, the sixties scoop where Indigenous children were placed in foster care of White or American families, recovering mass graves beside residential schools).” Also note, that item seven was an attention check item. We created four additional items as listed below.

1. I would attend peaceful demonstrations in support of the ‘Every Child Matters’ movement
2. I would attend peaceful demonstrations for the removal of statues.
3. I would attend peaceful demonstrations supporting the rights of First Nations, Metis, and Inuit Peoples.
4. I would attend peaceful rallies to raise awareness on the historical injustice against Indigenous people in Canada.

#### Non-normative Collective Action

Imhoff, R., Dieterle, L., & Lamberty, P. (2021). Resolving the puzzle of conspiracy worldview and political activism: Belief in secret plots decreases normative but increases nonnormative political engagement. *Social Psychological and Personality Science*, *12*(1), 71–79. https://doi.org/10.1177/1948550619896491

*Note*: We asked participants, “To what extent would you engage in these behaviours to reduce unjust treatment of Indigenous people (e.g., residential schools, the sixties scoop where Indigenous children were placed in foster care of White or American families, recovering mass graves beside residential schools).” We created four additional items as listed below.

1. I would attend violent demonstrations in support of the ‘Every Child Matters’ movement.
2. I would attend violent demonstrations for the removal of statues.
3. I would attend violent demonstrations supporting the rights of First Nations, Metis, and Inuit Peoples.
4. I would attend violent rallies to raise awareness on the history of residential schools in Canada.

#### Prior Education

Do you remember an Indigenous history being taught in the curriculum as you were  
growing up?

* Yes
* No

Did you look up any resources like the internet to look up any answers or fact check?

* Yes / No
* If yes, what did you look up? \_\_\_\_\_\_\_\_\_\_

### Sample 2 (the U.S.)

#### Demographics

1. What is your age?
2. What is your ethnicity?

Arab

Black

Chinese

Filipino

Indigenous Peoples in the United States (e.g. Native American, Alaska Native, Inuit, Samoan, Marshallese)

Japanese

Korean

Latin American

South Asian (e.g. Indian, Pakistani, Sri Lankan, Bangladeshi)

Southeast Asian (e.g. Vietnamese, Cambodian, Laotian, Thai)

West Asian (e.g. Afghan, Iranian)

White/ European

Other (please specify)\_\_\_\_\_\_

1. What is your gender?

Male

Female

Non-binary

There isn’t have an option that applies to me, I identify as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Where did you grow up?
2. What country do you live in currently?

#### Morality (social dominance orientation)

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, *109*(6), 1003–1028. https://doi.org/10.1037/pspi0000033

#### Morality (Right-wing authoritarianism)

Zakrisson, I. (2005). Construction of a short version of the right-wing authoritarianism (RWA) scale. *Personality and Individual Differences*, *39*, 863–872. https://doi.org/10.1016/j.paid.2005.02.026

#### Intergroup Contact

##### General quantity

Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*(6), 700–710. https://doi.org/10.1177/0146167293196005

*Note*: We used the words “Black people” as the contact group.

##### General Quality

Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*(6), 700–710. https://doi.org/10.1177/0146167293196005

*Note*: We used the words “Black people” as the contact group.

##### Cross-Group Friendship

Smith, T. W. (2002). Measuring inter-racial friendships. *Social Science Research*, *31*(4), 576–593. https://doi.org/10.1016/S0049-089X(02)00015-7

*Note:* We used Smith’s (2002), Network approach and asked the following questions listed below about each friend indicated.

For each listed friend, the following questions will be asked:

1. [friend’s initial/ nickname]’s gender:

* Male
* Female
* My friend identifies as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. [friend’s initial/ nickname] is a member of the following ethnic group(s):

* Arab
* Black
* Chinese
* Filipino
* Indigenous Peoples of the United States (e.g. Native American, Alaska Native, Inuit, Samoan, Marshallese)
* Japanese
* Korean
* Latin American
* South Asian (e.g. Indian, Pakistani, Sri Lankan, Bangladeshi)
* Southeast Asian (e.g. Vietnamese, Cambodian, Laotian, Thai)
* West Asian (e.g. Afghan, Iranian)
* White/ European
* Other (please specify)\_\_\_\_\_\_

1. Did you ever witness [friend’s name/nickname] be discriminated against?
2. Did [friend’s name/nickname] ever share an experience of discrimination with you?
3. How long have you been friends with this person (in years)? \_\_\_\_\_\_
4. Please use the following thermometer to indicate your overall attitude toward [friend’s name/ nickname]

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Extremely unfavourable 0-10o | 11-20o | 21-30o | 31-40o | 41-50o | 51-60o | 61-70o | 71-80o | 81-90o | Extremely favourable 91-1000 |
| Friend’s name | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |

1. How close do you feel to [friend’s name/nickname]?” 1 (Not at all) to 7 (Very much).

#### Knowledge

##### Self-report

Zagefka, H., González, R., Brown, R., Lay, S., Manzi, J., & Didier, N. (2017). To know you is to love you: Effects of intergroup contact and knowledge on intergroup anxiety and prejudice among indigenous Chileans. *International Journal of Psychology*, *52*(4), 308–315. https://doi.org/10.1002/ijop.12229

Mansouri, F., & Vergani, M. (2018). Intercultural contact, knowledge of Islam, and prejudice against muslims in Australia. *International Journal of Intercultural Relations*, *66*, 85–94. https://doi.org/10.1016/j.ijintrel.2018.07.001

*Note*: We used Zagefka et al.’s Study 1 Intergroup knowledge measure, replacing the words, “non-Indigenous” with “Black people’s.”

##### Factual Knowledge

Jiang, S., Postovit, L., Cattaneo, A., Binder, E. B., & Aitchison, K. J. (2019). Epigenetic modifications in stress response genes associated With childhood trauma. *Frontiers in Psychiatry*, *10*. https://doi.org/10.3389/fpsyt.2019.00808

Nelson, J. C. (2010). *The role of knowledge of racist history and identity in perception of racism* [Doctoral Dissertation, University of Kansas]. https://kuscholarworks.ku.edu/handle/1808/7741

Strickhouser, J. E., Zell, E., & Harris, K. E. (2019). Ignorance of history and perceptions of racism: Another look at the Marley Hypothesis. *Social Psychological and Personality Science*, *10*(7), 977–985. https://doi.org/10.1177/1948550618808863

*Note:* We used Strickhouser et al.’s (2019) items # 4, 5, 7, 9 12, and 14. We asked, “People’s knowledge of historical events can vary. With that in mind please rate how much you believe a statement is true on a scale ranging from Definitely false (1) to Definitely true (5).” We created an additional item listed below.

1. If a Black Grandma experienced trauma (e.g., violence, sexual assault) in her childhood, it may persistently reduce her ability to lower stress hormones (i.e., cortisol) in her blood, meaning she remains chronically stressed throughout her lifetime. These physiological changes can be passed down to her children and her grandchildren even if they do not experience trauma themselves.

##### Perception of Isolated Racism

Nelson, J. C. (2010). *The role of knowledge of racist history and identity in perception of racism* [Doctoral Dissertation, University of Kansas]. https://kuscholarworks.ku.edu/handle/1808/7741

*Note:* We used Nelson’s measure found in Appendix B, part B. We replaced all the words “person of color” and “African American,” with “Black person.”

##### Perception of Systemic Racism

Bureau of Justice Statistics. (2021). *Census of State and Federal Adult Correctional Facilities, 2019 – Statistical Tables*. U.S. Department of Justice. https://bjs.ojp.gov/library/publications/census-state-and-federal-adult-correctional-facilities-2019-statistical-tables

Children’s Bureau. (2021). *Adoption and Foster Care Analysis and Reporting System (AFCARS) FY 2020 data* (Adoption & Foster Care Statistics). U.S. Deaprtment of Health and Human Services. https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/afcars

Ely, D., & Driscoll, A. (2021). *Infant mortality in the United States, 2019: Data from the period linked birth/infant death file*. National Center for Health Statistics (U.S.). https://doi.org/10.15620/cdc:111053

Nelson, J. C. (2010). *The role of knowledge of racist history and identity in perception of racism* [Doctoral Dissertation, University of Kansas]. https://kuscholarworks.ku.edu/handle/1808/7741

Paradies, Y. C., & Cunningham, J. (2008). Development and validation of the Measure of Indigenous Racism Experiences (MIRE). *International Journal for Equity in Health*, *7*(1), 9. https://doi.org/10.1186/1475-9276-7-9

U.S. Census Bureau. (2018). *Income and Poverty in the United States: 2020* (P60-273). https://www.census.gov/data/tables/2021/demo/income-poverty/p60-273.html

*Note:* The first three items and stem question are adapted from Nelson (2010) and we created the remaining items. We used the phrase ‘less opportunities’ rather than the grammatically correct ‘fewer opportunities’ as the former was thought to be more easily understood by respondents. We asked, “The following items describe a policy, decision, or existing state of affairs. Please select a number from the scale below to indicate how much YOU, personally, think racism plays a role in each.”

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Not at all |  |  | Somewhat |  |  | Certainly |

1. The practice of racial profiling—using only information about race to make a decision, for example, police searching more Black youth than White youth in public spaces.
2. The relatively small number of Black people in positions of influence such as politicians, judges, university professors, or celebrities.
3. The high rate of poverty of Black people in the United States.
4. Black people make up 13% of the total of the overall United States adult population however Black people make up 33% of the United States prison population.
5. Black children made up 14% of the total child population of the United States and Black children make up roughly 23% of the total foster care population in US.
6. More Black infants die per year compared to non-Black infants in the United States.
7. Black people have less opportunities than other Americans.
8. Non-Black Americans think that Black people are better off because they get special treatment from the government.
9. There is hardly ever anything good about Black people in the media (TV, radio, newspapers, etc.).

#### Social Identification

Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, *3*(3), 239–262. https://doi.org/10.1080/13576500444000047

Nassar, L. (2021). *Psychological barriers and motivators of normative and non-normative collective action* [Unpublished doctoral dissertation]. Toronto Metropolitan University.

Thomas, E. F., Smith, L. G. E., McGarty, C., Reese, G., Kende, A., Bliuc, A., Curtin, N., & Spears, R. (2019). When and how social movements mobilize action within and across nations to promote solidarity with refugees. *European Journal of Social Psychology*, *49*(2), 213–229. https://doi.org/10.1002/ejsp.2380

*Note:* We adapted these from Thomas(2019) and Nassar (2021). We asked “Please rate each statement using the scale below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

1. I see myself as a supporter of efforts to ensure that Black people are treated fairly and compensated for past actions.
2. I am pleased to be a supporter of efforts to ensure that Black people are treated fairly and compensated for past actions.
3. I identify with other supporters of efforts to ensure that Black people are treated fairly and compensated for past actions.
4. I identify as an ally to Black people.

#### Group Efficacy

Nassar, L. (2021). *Psychological barriers and motivators of normative and non-normative collective action* [Unpublished doctoral dissertation]. Toronto Metropolitan University.

Note: We used the words Black people to describe the group in these items

#### Anger at Injustice

Selvanathan, H. P., Techakesari, P., Tropp, L. R., & Barlow, F. K. (2018). Whites for racial justice: How contact with Black Americans predicts support for collective action among White Americans. *Group Processes & Intergroup Relations*, *21*(6), 893–912. https://doi.org/10.1177/1368430217690908

*Note:* We used the 10 items from study 3 that measured anger. We asked, “When thinking about the injustice that Black peoples in the United States face/ have faced what extent does it make you feel”

#### Normative Collective Action

Imhoff, R., Dieterle, L., & Lamberty, P. (2021). Resolving the puzzle of conspiracy worldview and political activism: Belief in secret plots decreases normative but increases nonnormative political engagement. *Social Psychological and Personality Science*, *12*(1), 71–79. https://doi.org/10.1177/1948550619896491

*Note*: We asked participants, “To what extent would you engage in these behaviors to reduce the unjust treatment of Black people (e.g., police violence against Black people, redlining, and predatory loan practices).” Also note, that item seven was an attention check item. We created four additional items as listed below.

1. I would attend peaceful demonstrations in support of the ‘Black Lives Matter’ movement
2. I would attend peaceful demonstrations for the removal of statues.
3. I would attend peaceful demonstrations supporting the rights of Black people.
4. I would attend peaceful rallies to raise awareness on the historical injustice against Black people in the United States.

#### Non-Normative Collective Action

Imhoff, R., Dieterle, L., & Lamberty, P. (2021). Resolving the puzzle of conspiracy worldview and political activism: Belief in secret plots decreases normative but increases nonnormative political engagement. *Social Psychological and Personality Science*, *12*(1), 71–79. https://doi.org/10.1177/1948550619896491

*Note*: We asked participants, “To what extent would you engage in these behaviors to reduce the unjust treatment of Black people (e.g., police violence against Black people, redlining, and predatory loan practices).” We created four additional items as listed below.

1. I would attend violent demonstrations in support of the ‘Black Lives Matter’ movement.
2. I would attend violent demonstrations for the removal of statues.
3. I would attend violent demonstrations supporting the rights of Black people.
4. I would attend violent rallies to raise awareness of the history of slavery and violence against Black people in the United States.

#### Prior Education

Do you remember Black history being taught in the curriculum as you were  
growing up?

* Yes
* No

Did you look up any resources like the internet to look up any answers or fact check?

* Yes / No

If yes, what did you look up? \_\_\_\_\_

# Supplementary Tables

**Table 4**

*Unstandardized Coefficients and 95% Bootstrapped Confidence Intervals for Paths in the Models; Normative Collective Action; Morality represented by Social Dominance Orientation*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *a*: Antecedent🡪 Ident | **.44** | **.73** | **.22** | **.31** | **.59** | **.65** | **.36** | **.19** | **.75** | **.84** | **.53** | **.76** | **.72** | **.85** |
| (.18) | (.18) | (.05) | (.06) | (.07) | (.09) | (.06) | (.07) | (.08) | (.10) | (.05) | (.05) | (.04) | (.03) |
| [.07, .80] | [.38, 1.09] | [.13, .31] | [.20, .42] | [.46, .73] | [.48, .81] | [.25, .48] | [.06, .32] | [.60, .90] | [.64, 1.03] | [.44, .63] | [.66, .86] | [.65, .80] | [.78, .92] |
| *b*: Antecedent🡪 Morality | .07 | .19 | **.08** | **.11** | **.26** | **.52** | .08 | .02 | **.45** | **.69** | **.41** | **.44** | **.47** | **.48** |
| (.13) | (.13) | (.03) | (.04) | (.05) | (.06) | (.04) | (.05) | (.06) | (.07) | (.03) | (.04) | (.03) | (.03) |
| [-.18, .33] | [-.06, .45] | [.11, .14] | [.03, .18] | [.17, .36] | [.40, .64] | [-.04, .16] | [-.07, .11] | [.34, .56] | [.56, .82] | [.34, .47] | [.36, .52] | [.41, .52] | [.42, .54] |
| *c*: Antecedent🡪 Anger | -.20 | .23 | -.00 | .09 | **.20** | **.26** | -.04 | -.01 | **.27** | **.33** | **.35** | **.29** | **.34** | **.27** |
| (.18) | (.18) | (.05) | (.06) | (.08) | (.10) | (.06) | (.07) | (.09) | (.11) | (.06) | (.07) | (.07) | (.08) |
| [-.56, .16] | [-.13, .59] | [-.09, .09] | [-.03, .20] | [.05, .35] | [.07, .45] | [-.17, .07] | [-.14, .12] | [.09, .45] | [.11, .56] | [.23, .47] | [.14, .44] | [.20, .48] | [.11, .43] |
| *d*: Antecedent🡪 Effic | -.13 | -.12 | -.03 | -.00 | -.01 | .01 | **-.07** | -.01 | .08 | .07 | **.12** | **.09** | **.26** | **.26** |
| (.10) | (.09) | (.03) | (.03) | (.04) | (.05) | (.03) | (.03) | (.05) | (.05) | (.03) | (.04) | (.04) | (.04) |
| [-.32, .07] | [-.05, .29] | [-.08, .02] | [-.06, .05] | [-.10, .07] | [-.08, .10] | [-.14, -.01] | [-.07, .05] | [-.02, .18] | [-.03, .18] | [.05, .19] | [.02, .16] | [.18, .33] | [.19, .33] |
| *e:* Antecedent🡪 Coll Act | .20 | .34 | **.15** | **.12** | .03 | .07 | **.19** | **.16** | **.22** | **.15** | **.14** | .05 | **.24** | .11 |
| (.13) | (.12) | (.03) | (.04) | (.06) | (.07) | (.04) | (.04) | (.07) | (.08) | (.05) | (.05) | (.06) | (.06) |
| [-.06, .46] | [-.10, .58] | [.08, .21] | [.04, .20] | [-.08, .14] | [-.06, .20] | [.10, .28] | [.08, .25] | [.09, .35] | [.00, .31] | [.05, .23] | [-.05, .15] | [.13, .35] | [-.01, .22] |
| *f:* Ident 🡪Anger | **.65** | **.74** | **.65** | **.74** | **.60** | **.72** | **.66** | **.76** | **.60** | **.73** | **.57** | **.67** | **.50** | **.61** |
| (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.05) | (.06) | (.06) | (.08) |
| [.55, .76] | [.62, .85] | [.54, .76] | [.63, .85] | [.48, .72] | [.60, .83] | [.55, .77] | [.65, .87] | [.49, .71] | [.62, .85] | [.46, .67] | [.54, .78] | [.38, .62] | [.47, .75] |
| *g:* Ident 🡪Effic | **.48** | **.66** | **.48** | **.66** | **.49** | **.65** | **.49** | **.66** | **.46** | **.66** | **.44** | **.63** | **.36** | **.52** |
| (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) |
| [.42, .53] | [.61, .71] | [.42, .54] | [.61, .72] | [.43, .56] | [.59, .70] | [43, .55] | [41, .72] | [.40, .52] | [.60, .71] | [.38, .50] | [.58, .69] | [.30, .42] | [.45, .58] |
| *h:* Ident 🡪Coll Act | **.35** | **.35** | **.32** | **.34** | **.34** | **.36** | **.30** | **.34** | **.34** | **.37** | **.36** | **.36** | **.31** | **.34** |
| (.05) | (.06) | (.05) | (.06) | (.06) | (.06) | (.05) | (.06) | (.05) | (.06) | (.05) | (.06) | (.05) | (.06) |
| [.25, .46] | [.23, .48] | [.22, .42] | [.22, .46] | [.23, .45] | [.24, .49] | [.19, .41] | [.22, .46] | [.23, .44] | [.24, .49] | [.25, .46] | [.23, .48] | [.21, .42] | [.21, .47] |
| *i:* Morality 🡪Anger | **.44** | **.34** | **.46** | **.33** | **.41** | **.29** | **.46** | **.33** | **.42** | **.26** | **.30** | **.27** | **.30** | **.25** |
| (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) |
| [.28, .60] | [.18, .50] | [.31, .61] | [.17, .49] | [.25, .57] | [.13, .46] | [.30, .61] | [.17, .49] | [.26,.57] | [.09,.42] | [.15, .46] | [.11, .43] | [.14, .46] | [.08, .41] |
| *j*: Morality 🡪Effic | **.26** | **.29** | **.27** | **.30** | **.26** | **.31** | **.26** | **.30** | **.26** | **.28** | **.22** | **.28** | **.15** | **.22** |
| (.04) | (.04) | (.04) | (.04) | (.05) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) |
| [.17, .35] | [.22, .37] | [.19, .35] | [.22, .37] | [.17, .34] | [.23, .39] | [.18, .34] | [.22, .37] | [.17, .34] | [.21, .36] | [.13, .30] | [.20, .36] | [.06, .23] | [.14, .29] |
| *k:* Morality 🡪Coll Act | .12 | .09 | **.10** | **.08** | **.14** | .07 | .12 | .09 | .08 | .05 | .06 | .07 | .02 | .06 |
| (.06) | (.06) | (.06) | (.06) | (.06) | (.03) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) |
| [-.00, .23] | [-.02, .21] | [-.01, .22] | [-.03, .20] | [.02, .26] | [-.05, .19] | [-.00, .23] | [-.02, .21] | [-.04, .20] | [-.07, .17] | [-.06, .18] | [-.05, .19] | [-.10, .15] | [-.06, .18] |
| *l:* Anger 🡪Coll Act | **.20** | **.17** | **.19** | **.17** | **.21** | **.17** | **.20** | **.17** | **.18** | **.17** | **.17** | **.17** | **.17** | **.17** |
| (.03) | (.03) | (.03) | (.03) | (.04) | (.03) | (.03) | (.03) | (.03) | (.03) | (.04) | (.03) | (.03) | (.03) |
| [.13, .27] | [.11, .23] | [.12, .26] | [.10, .23] | [.14, .28] | [.11, .23] | [.13, .26] | [.11, .24] | [.11, .25] | [.10, .23] | [.10, .24] | [.10, .23] | [.10, .23] | [.10, .23] |
| *m:* Effic 🡪Coll Act | .21 | .13 | **.23** | **.13** | **.20** | .13 | **.24** | **.14** | **.20** | .12 | **.19** | .12 | .13 | .09 |
| (.06) | (.07) | (.06) | (.07) | (.07) | (.07) | (.06) | (.07) | (.06) | (.07) | (.06) | (.07) | (.06) | (.07) |
| [.09, .34] | [-.01, .26] | [.10, .35] | [.00, .27] | [.07, .32] | [-.01, .26] | [.11, .36] | [.01, .27] | [.07, .32] | [-.01, .26] | [.06, .31] | [.01, .26] | [-.00, .26] | [-.05, .23] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 5**

*Indirect Effects for the Models Normative Collective Action; Morality represented by Social Dominance Orientation*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *i*: Antecedent🡪 Ident 🡪 Coll Act | **.15** | **.26** | **.07** | **.11** | **.20** | **.23** | **.11** | **.07** | **.25** | **.31** | **.19** | **.27** | **.23** | **.29** |
| (.06) | (.08) | (.03) | (.03) | (.05) | (.06) | (.03) | (.03) | (.05) | (.07) | (.04) | (.06) | (.04) | (.07) |
| [.04, .29] | [.12, .44] | [.07, .11] | [.05, .17] | [.12, .30] | [.13, .36] | [.06, .17] | [.01, .13] | [.15, .37] | [.18, .46] | [.12, .27] | [.16, .40] | [.14, .32] | [.16, .44] |
| *ii*: Antecedent🡪 Morality 🡪 Coll Act | .01 | .02 | .01 | .01 | **.04** | .04 | .01 | .00 | .04 | .03 | .02 | .03 | .01 | .03 |
| (.02) | (.02) | (.02) | (.01) | (.02) | (.04) | (.01) | (.01) | (.03) | (.05) | (.03) | (.03) | (.02) | (.03) |
| [-.02, .04] | [-.01, .06] | [-.00, .02] | [-.01, .03] | [.00, .08] | [-.04, .12] | [-.00, .03] | [-.01, .02] | [-.02, .10] | [-.06, .13] | [-.02, .08] | [-.03, .09] | [-.04, .07] | [-.04, .09] |
| *iii*: Antecedent🡪 Anger 🡪 Coll Act | -.04 | .04 | -.00 | -.01 | **.04** | **.04** | -.01 | -.00 | **.04** | **.06** | **.06** | **.04** | **.06** | **.04** |
| (.04) | (.03) | (.01) | (.01) | (.02) | (.02) | (.01) | (.01) | (.02) | (.02) | (.02) | (.02) | (.02) | (.02) |
| [-.13, .04] | [-.02, .11] | [-.02, .02] | [-.00, .04] | [.01, .08] | [.01, .08] | [-.04, .02] | [-.03, .02] | [.01, .09] | [.01, .11] | [.03, .10] | [.02, .09] | [.02, .10] | [.01, .09] |
| *iv*: Antecedent🡪 Effic 🡪 Coll Act | -.03 | .02 | -.01 | -.00 | -.00 | .00 | -.02 | -.00 | .02 | .01 | **.02** | .01 | .03 | .02 |
| (.02) | (.02) | (.01) | (.00) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) | (.02) | (.02) |
| [-.08, .01] | [-.01, .05] | [-.02, .01] | [-.01, .01] | [-.03, .02] | [-.01, .02] | [-.04, .00] | [-.02, .01] | [-.01, .04] | [-.01, .03] | [.00, .05] | [-.00, .03] | [-.00, .08] | [-.02, .07] |
| *v:* Antecedent🡪 Ident 🡪 Anger 🡪 Coll Act | **.06** | **.09** | **.03** | **.04** | **.07** | **.08** | **.05** | **.03** | **.08** | **.10** | **.05** | **.08** | **.06** | **.09** |
| (.03) | (.03) | (.01) | (.01) | (.02) | (.02) | (.01) | (.01) | (.02) | (.03) | (.01) | (.02) | (.02) | (.02) |
| [.01, .11] | [.04, .16] | [.01, .05] | [.02, .07] | [.04, .12] | [.04, .13] | [.02, .08] | [.01, .05] | [.04, .12] | [.05, .16] | [.03, .08] | [.04, .13] | [.03, .09] | [.05, .14] |
| *vi:* Antecedent🡪 Ident 🡪 Effic 🡪 Coll Act | **.04** | .06 | **.02** | .03 | **.06** | .05 | **.04** | .02 | **.07** | .07 | **.04** | .06 | .03 | .04 |
| (.02) | (.04) | (.01) | (.02) | (.02) | (.03) | (.01) | (.01) | (.03) | (.04) | (.02) | (.04) | (.02) | (.03) |
| [.01, .10] | [-.02, .15] | [.01, .04] | [-.00, .06] | [.02, .10] | [-.01, .12] | [.02, .07] | [-.00, .04] | [.02, .12] | [-.02, .15] | [.01, .08] | [-.02, .13] | [-.00, .08] | [-.03, .11] |
| *vii:* Antecedent🡪 Morality 🡪 Anger 🡪 Coll Act | .01 | .01 | **.01** | **.01** | **.02** | **.03** | .01 | .00 | **.03** | **.03** | **.02** | **.02** | **.02** | **.02** |
| (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) |
| [-.02, .03] | [-.00, .03] | [.00, .01] | [.00, .01] | [.01, .04] | [.01, .05] | [-.00, .02] | [-.01, .01] | [.01, .06] | [.01, .06] | [.01, .04] | [.01, .04] | [.01, .05] | [.00, .04] |
| *viii:* Antecedent🡪 Morality 🡪 Effic 🡪 Coll Act | .00 | .01 | **.00** | .00 | **.01** | .02 | .00 | .00 | **.02** | .02 | **.02** | .02 | .01 | .01 |
| (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.00) | (.00) | (.01) | (.02) | (.01) | (.01) | (.01) | (.01) |
| [-.01, .02] | [-.00, .03] | [.00, .01] | [-.00, .01] | [.00, .03] | [-.00, .05] | [-.00, .01] | [-.00, .01] | [.01, .05] | [-.01, .06] | [.00, .03] | [-.01, .04] | [-.00, .02] | [-.01, .03] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 6**

*Unstandardized Coefficients and 95% Bootstrapped Confidence Intervals for Paths in the Models; Normative Collective Action; Morality represented by Right-Wing Authoritarianism*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *a*: Antecedent🡪 Ident | **.44** | **.73** | **.22** | **.31** | **.59** | **.65** | **.36** | **.19** | **.75** | **.84** | **.53** | **.76** | **.72** | **.85** |
| (.18) | (.18) | (.05) | (.06) | (.07) | (.09) | (.06) | (.07) | (.08) | (.10) | (.05) | (.05) | (.04) | (.03) |
| [.07, .80] | [.38, 1.09] | [.13, .31] | [.20, .42] | [.46, .73] | [.48, .81] | [.25, .48] | [.06, .32] | [.60, .90] | [.64, 1.03] | [44, .63] | [.66, .86] | [.65, .80] | [.78, .92] |
| *b*: Antecedent🡪 Morality | -.04 | .07 | .04 | .01 | **.10** | **.22** | **.09** | -.07 | **.41** | **.67** | **.25** | **.34** | **.31** | **.52** |
| (.10) | (.13) | (.03) | (.04) | (.04) | (.06) | (.03) | (.05) | (.04) | (.07) | (.03) | (.04) | (.03) | (.03) |
| [-.25, .16] | [-.19, .32] | [-.02, .09] | [-.07, .08] | [.02, .18] | [.10, .34] | [.03, .16] | [-.16, .03] | [.32, .49] | [.54, .80] | [.19, .30] | [.26, .42] | [.26, .36] | [.46, .57] |
| *c*: Antecedent🡪 Anger | -.19 | .22 | -.00 | .10 | **.23** | **.34** | -.09 | -.01 | **.26** | **.42** | **.38** | **.33** | **.39** | **.36** |
| (.18) | (.19) | (.05) | (.06) | (.08) | (.09) | (.06) | (.07) | (.10) | (.11) | (.06) | (.07) | (.07) | (.09) |
| [-.56, .17] | [-.15, .59] | [-.09, .09] | [-.02, .21] | [.07, .38] | [.16, .53] | [-.21, .04] | [-.14, .12] | [.07, .45] | [.19, .65] | [.26, .50] | [.18, .48] | [.25, .53] | [.19, .54] |
| *d*: Antecedent🡪 Effic | -.11 | -.15 | -.03 | .02 | .00 | .01 | **-.10** | .01 | .05 | .07 | **.14** | **.11** | **.27** | **.24** |
| (.10) | (.09) | (.03) | (.03) | (.04) | (.05) | (.03) | (.03) | (.05) | (.05) | (.03) | (.03) | (.04) | (.04) |
| [-.31, .08] | [-.02, .32] | [-.08, .02] | [-.03, .08] | [-.08, .09] | [-.08, .10] | [-.16, -.03] | [-.05, .07] | [-.05, .15] | [-.04, .18] | [.07, .20] | [.04, .18] | [.20, .35] | [.16, .32] |
| *e:* Antecedent🡪 Coll Act | .21 | **.35** | **.15** | **.13** | .04 | .09 | **.18** | **.17** | **.20** | .15 | **.13** | .06 | **.22** | .10 |
| (.13) | (.12) | (.03) | (.04) | (.05) | (.07) | (.04) | (.04) | (.07) | (.08) | (.05) | (.05) | (.06) | (.06) |
| [-.04, .47] | [.11, .59] | [.08, .21] | [.05, .21] | [-.07, .15] | [-.04, .22] | [.09, .26] | [.08, .26] | [.06, .33] | [-.00, .31] | [.04, .22] | [-.04, .16] | [.11, .33] | [-.02, .23] |
| *f:* Ident 🡪Anger | **.75** | **.83** | **.75** | **.82** | **.66** | **.78** | **.76** | **.85** | **.70** | **.81** | **.62** | **.72** | **.55** | **.67** |
| (.05) | (.06) | (.05) | (.06) | (.09) | (.06) | (.05) | (.06) | (.05) | (.05) | (.05) | (.06) | (.06) | (.07) |
| [.65, .85] | [.72, .94] | [.65, .85] | [.71, .94] | [.55, .78] | [.67, .89] | [.66, .86] | [.74, .96] | [.60, .80] | [.70, .92] | [.52, .72] | [.60, .84] | [.43, .67] | [.53, .81] |
| *g:* Ident 🡪Effic | **.52** | **.68** | **.53** | **.67** | **.53** | **.65** | **.54** | **.68** | **.51** | **.67** | **.48** | **.64** | **.38** | **.56** |
| (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) |
| [.47, .58] | [.62, .73] | [.47, .58] | [.62, .73] | [.47, .59] | [.59, .70] | [.49, .59] | [63, .73] | [.46, .57] | [.62, .72] | [.42, .53] | [.58, .69] | [.32, .45] | [.50, .62] |
| *h:* Ident 🡪Coll Act | **.36** | **.35** | **.33** | **.34** | **.35** | **.36** | **.32** | **.34** | **.35** | **.37** | **.36** | **.36** | **.32** | **.34** |
| (.05) | (.06) | (.05) | (.06) | (.06) | (.06) | (.05) | (.06) | (.05) | (.06) | (.05) | (.06) | (.05) | (.06) |
| [.26, .47] | [.23, .48] | [.23, .43] | [.22, .46] | [.24, .46] | [.24, .49] | [.21, .42] | [.22, .46] | [.25, .45] | [.24, .49] | [.26, .46] | [.23, .48] | [.22, .42] | [.22, .47] |
| *i:* Morality 🡪Anger | **.36** | .14 | **.38** | .15 | **.42** | .14 | **.38** | .12 | **.31** | -.04 | **.21** | .09 | .18 | -.04 |
| (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.05) | (.08) | (.09) | (.09) |
| [.18, .53] | [-.02, .29] | [.21, .55] | [-.01, .30] | [.24, .60] | [-.02, .29] | [.21, .56] | [-.03, .28] | [.12, .49] | [-.12,.19] | [.11, .31] | [-.06, .24] | [-.00, .36] | [-.22, .13] |
| *j*: Morality 🡪Effic | **.27** | **.29** | **.26** | **.29** | **.28** | **.31** | **.27** | **.29** | **.25** | **.27** | **.22** | **.28** | **.12** | **.18** |
| (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.04) | (.04) | (.05) | (.04) |
| [.17, .36] | [.22, .36] | [.17, .36] | [.22, .37] | [.18, .38] | [.23, .39] | [.18, .36] | [.22, .36] | [.15, .35] | [.20, .35] | [.13, .30] | [.21, .35] | [.03, .22] | [.10, .25] |
| *k:* Morality 🡪Coll Act | **.20** | .09 | **.19** | **.11** | **.14** | .09 | **.17** | **.11** | **.14** | .05 | **.17** | .07 | .11 | .04 |
| (.03) | (.06) | (.06) | (.06) | .07 | (.06) | (.06) | (.06) | (.07) | (.06) | (.07) | (.06) | (.07) | (.06) |
| [.07, .33] | [-.02, .20] | [-.07, .32] | [-.00, .22] | [.00, .27] | [-.03, .20] | [.05, .30] | [.00, .23] | [.01, .27] | [-.07, .16] | [.03, .29] | [-.04, .18] | [-.03, .24] | [-.08, .16] |
| *l:* Anger 🡪Coll Act | **.20** | **.17** | **.19** | **.17** | **.21** | **.17** | **.20** | **.18** | **.18** | **.17** | **.17** | **.17** | **.16** | **.17** |
| (.03) | (.03) | (.03) | (.03) | (.04) | (.03) | (.03) | (.03) | (.03) | (.03) | (.04) | (.03) | (.03) | (.03) |
| [.13, .27] | [.11, .24] | [.12, .26] | [.11, .23] | [.14, .28] | [.11, .24] | [.13, .26] | [.12, .24] | [.11, .25] | [.11, .23] | [.10, .24] | [.11, .24] | [.10, .23] | [.11, .23] |
| *m:* Effic 🡪Coll Act | **.20** | .12 | **.21** | .12 | **.20** | .12 | **.23** | .13 | **.19** | .12 | **.17** | .12 | .12 | .10 |
| (.06) | (.07) | (.06) | (.07) | (.07) | (.07) | (.06) | (.07) | (.06) | (.07) | (.06) | (.07) | (.07) | (.07) |
| [.08, .33] | [-.01, .25] | [.09, .34] | [-.01, .25] | [.07, .33] | [-.02, .25] | [.10, .35] | [-.01, .26] | [.07, .32] | [-.01, .26] | [.04, .30] | [-.02, .26] | [-.01, .25] | [-.04, .24] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 7**

*Indirect Effects for the Models Normative Collective Action; Morality represented by Right-Wing Authoritarianism*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *i*: Antecedent🡪 Ident 🡪 Coll Act | **.16** | **.26** | **.07** | **.11** | **.21** | **.23** | **.12** | **.07** | **.26** | **.31** | **.19** | **.27** | **.23** | **.29** |
| (.06) | (.08) | (.03) | (.03) | (.05) | (.06) | (.03) | (.03) | (.06) | (.07) | (.04) | (.06) | (.05) | (.07) |
| [.04, .29] | [.12, .44] | [.07, .11] | [.05, .17] | [.12, .31] | [.13, .35] | [.06, .17] | [.02, .13] | [.16, .38] | [.18, .46] | [.13, .27] | [.16, .40] | [.15, .32] | [.17, .44] |
| *ii*: Antecedent🡪 Morality 🡪 Coll Act | -.01 | .01 | .01 | .00 | .01 | .02 | **.02** | -.01 | .06 | .03 | **.04** | .03 | .03 | .02 |
| (.02) | (.01) | (.02) | (.01) | (.01) | (.01) | (.01) | (.01) | (.03) | (.04) | (.02) | (.02) | (.03) | (.03) |
| [-.06, .03] | [-.02, .04] | [-.00, .02] | [-.01, .01] | [-.00, .04] | [-.01, .05] | [.00, .04] | [-.03, .00] | [-.00, .12] | [-.05, .11] | [.00, .08] | [-.01, .07] | [-.01, .08] | [-.05, .09] |
| *iii*: Antecedent🡪 Anger 🡪 Coll Act | -.04 | .04 | -.00 | .02 | **.05** | **.06** | -.02 | -.00 | **.05** | **.07** | **.06** | **.06** | **.06** | **.06** |
| (.04) | (.03) | (.01) | (.01) | (.02) | (.02) | (.01) | (.01) | (.02) | (.03) | (.02) | (.02) | (.02) | (.02) |
| [-.13, .04] | [-.03, .11] | [-.02, .02] | [-.00, .04] | [.01, .09] | [.02, .10] | [-.04, .01] | [-.03, .03] | [.01, .09] | [.03, .13] | [.03, .10] | [.02, .10] | [.03, .11] | [.02, .12] |
| *iv*: Antecedent🡪 Effic 🡪 Coll Act | -.02 | .02 | -.01 | .00 | .00 | .01 | **-.02** | .00 | .01 | .01 | **.02** | .01 | .03 | .02 |
| (.02) | (.02) | (.01) | (.00) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) | (.02) | (.02) |
| [-.07, .02] | [-.01, .05] | [-.02, .01] | [-.01, .02] | [-.02, .02] | [-.00, .03] | [-.05, -.00] | [-.01, .02] | [-.01, .03] | [-.01, .03] | [.00, .05] | [-.00, .03] | [-.01, .07] | [-.01, .07] |
| *v:* Antecedent🡪 Ident 🡪 Anger 🡪 Coll Act | **.07** | **.11** | **.03** | **.04** | **.08** | **.09** | **.05** | **.03** | **.09** | **.11** | **.05** | **.09** | **.06** | **.10** |
| (.03) | (.04) | (.01) | (.01) | (.02) | (.03) | (.01) | (.01) | (.02) | (.03) | (.01) | (.02) | (.02) | (.02) |
| [.01, .13] | [.05, .19] | [.01, .05] | [.02, .07] | [.05, .13] | [.04, .14] | [.03, .09] | [.01, .06] | [.05, .14] | [.06, .19] | [.03, .09] | [.05, .14] | [.04, .10] | [.05, .15] |
| *vi:* Antecedent🡪 Ident 🡪 Effic 🡪 Coll Act | **.05** | .06 | **.02** | .03 | **.06** | .05 | **.04** | .02 | **.07** | .07 | **.04** | .06 | .03 | .05 |
| (.02) | (.04) | (.01) | (.02) | (.02) | (.03) | (.02) | (.01) | (.03) | (.04) | (.02) | (.04) | (.02) | (.04) |
| [.01, .10] | [-.02, .14] | [.01, .04] | [-.00, .06] | [.02, .11] | [-.01, .11] | [.02, .08] | [-.00, .04] | [.02, .13] | [-.02, .15] | [.01, .08] | [-.02, .12] | [-.01, .08] | [-.02, .11] |
| *vii:* Antecedent🡪 Morality 🡪 Anger 🡪 Coll Act | -.00 | .00 | .00 | .00 | **.01** | .01 | **.01** | -.00 | **.02** | .00 | **.01** | .01 | .01 | -.00 |
| (.01) | (.00) | (.00) | (.00) | (.01) | (.00) | (.00) | (.00) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) |
| [-.02, .01] | [-.00, .01] | [-.00, .01] | [-.00, .00] | [.00, .02] | [-.00, .01] | [.00, .02] | [-.01, .00] | [.01, .04] | [-.02, .03] | [.00, .02] | [-.00, .02] | [.00, 02] | [-.02, .01] |
| *viii:* Antecedent🡪 Morality 🡪 Effic 🡪 Coll Act | -.00 | .00 | .00 | .00 | **.01** | .01 | **.01** | -.00 | **.02** | .02 | **.01** | .01 | .00 | .01 |
| (.01) | (.01) | (.00) | (.00) | (.00) | (.01) | (.00) | (.00) | (.01) | (.02) | (.00) | (.01) | (.00) | (.01) |
| [-.02, .01] | [-.01, .02] | [-.00, .01] | [-.00, .00] | [.00, .01] | [-.00, .02] | [.00, .01] | [-.01, .00] | [.01, .04] | [-.00, .06] | [.00, .02] | [-.00, .03] | [-.00, .01] | [-.00, .03] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 8**

*Unstandardized Coefficients and 95% Bootstrapped Confidence Intervals for Paths in the Models; Non-Normative Collective Action; Morality represented by Social Dominance Orientation*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *a*: Antecedent🡪 Ident | **.44** | **.73** | **.22** | **.31** | **.59** | **.65** | **.36** | **.19** | **.75** | **.84** | **.53** | **.76** | **.72** | **.85** |
| (.18) | (.18) | (.05) | (.06) | (.07) | (.09) | (.06) | (.07) | (.08) | (.10) | (.05) | (.05) | (.04) | (.03) |
| [.07, .80] | [.38, 1.09] | [.13, .31] | [.20, .42] | [.46, .73] | [.48, .81] | [.25, .48] | [.06, .32] | [.60, .90] | [.64, 1.03] | [44, .63] | [.66, .86] | [.65, .80] | [.78, .92] |
| *b*: Antecedent🡪 Morality | .07 | .19 | **.08** | **.11** | **.26** | **.52** | .08 | .02 | **.45** | **.69** | **.41** | **.44** | **.47** | **.48** |
| (.13) | (.13) | (.03) | (.04) | (.05) | (.06) | (.04) | (.05) | (.06) | (.07) | (.03) | (.04) | (.03) | (.03) |
| [-.18, .33] | [-.06, .45] | [.11, .14] | [.03, .18] | [.18, .36] | [.40, .64] | [-.00, .16] | [-.07, .11] | [.34, .56] | [.56, .82] | [.34, .47] | [.36, .52] | [.41, .52] | [.42, .54] |
| *c*: Antecedent🡪 Anger | -.20 | .23 | -.00 | .09 | **.20** | **.26** | -.05 | -.01 | **.27** | **.33** | **.35** | **.29** | **.34** | **.27** |
| (.18) | (.18) | (.05) | (.06) | (.08) | (.10) | (.06) | (.07) | (.09) | (.11) | (.06) | (.07) | (.07) | (.08) |
| [-.56, .16] | [-.13, .59] | [-.09, .09] | [-.03, .20] | [.05, .35] | [.07, .45] | [-.17, .07] | [-.14, .12] | [.09, .45] | [.11, .56] | [.23, .47] | [.14, .44] | [.20, .48] | [.11, .43] |
| *d*: Antecedent🡪 Effic | -.13 | -.12 | -.03 | -.00 | -.01 | -.01 | **-.07** | -.01 | .08 | .07 | **.12** | **.09** | **.26** | **.26** |
| (.10) | (.09) | (.03) | (.03) | (.04) | (.05) | (.03) | (.03) | (.05) | (.05) | (.03) | (.04) | (.04) | (.04) |
| [-.32, .07] | [-.05, .29] | [-.08, .02] | [-.06, .05] | [-.10, .07] | [-.08, .10] | [-.14, -.01] | [-.07, .05] | [-.02, .18] | [-.03, .18] | [.05, .19] | [.02, .16] | [.18, .33] | [.19, .33] |
| *e:* Antecedent🡪 Coll Act | .06 | .17 | **.05** | **.06** | .01 | -.10 | **.07** | **.10** | .04 | -.03 | .02 | .07 | **.09** | **.18** |
| (.08) | (.10) | (.02) | (.03) | (.04) | (.05) | (.03) | (.04) | (.04) | (.06) | (.03) | (.04) | (.03) | (.05) |
| [-.10, .22] | [-.03, .36] | [.01, .09] | [.00, .12] | [-.06, .08] | [-.20, .01] | [.01, .12] | [.03, .17] | [-.04, .12] | [-.15, .10] | [-.04, .07] | [-.02, .14] | [.02, .16] | [.09, .27] |
| *f:* Ident 🡪Anger | **.65** | **.74** | **.65** | **.74** | **.60** | **.72** | **.67** | **.76** | **.60** | **.73** | **.57** | **.66** | **.50** | **.61** |
| (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.06) | (.05) | (.06) | (.06) | (.08) |
| [.55, .76] | [.62, .85] | [.54, .76] | [.63, .85] | [.48, .72] | [.60, .83] | [.55, .77] | [.65, .87] | [.49, .71] | [.62, .85] | [.46, .67] | [.54, .78] | [.38, .62] | [.47, .75] |
| *g:* Ident 🡪Effic | **.48** | **.66** | **.48** | **.66** | **.49** | **.65** | **.49** | **.66** | **.46** | **.66** | **.44** | **.63** | **.36** | **.52** |
| (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) |
| [.42, .53] | [.61, .71] | [.42, .54] | [.61, .72] | [.43, .56] | [.59, .70] | [.43, .55] | [41, .72] | [.40, .52] | [.60, .71] | [.38, .50] | [.58, .69] | [.30, .42] | [.45, .58] |
| *h:* Ident 🡪Coll Act | **.08** | **.12** | **.07** | **.11** | **.08** | **.13** | .06 | **.11** | **.08** | **.13** | **.08** | **.11** | **.07** | .08 |
| (.03) | (.05) | (.03) | (.05) | (.04) | (.05) | (.03) | (.05) | (.03) | (.05) | (.03) | (.05) | (.03) | (.05) |
| [.02, .15] | [.02, .23] | [.01, .14] | [.01, .21] | [.01, .15] | [.03, .23] | [-.00, .13] | [.01, .21] | [.02, .14] | [.03, .22] | [.02, .15] | [.02, .21] | [.00, .13] | [-.02, .18] |
| *i:* Morality 🡪Anger | **.44** | **.34** | **.46** | **.33** | **.41** | **.29** | **.46** | **.33** | **.42** | **.26** | **.30** | **.27** | **.30** | **.25** |
| (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) | (.08) |
| [.28, .60] | [.18, .50] | [.31, .61] | [.17, .49] | [.25, .57] | [.13, .46] | [.30, .61] | [.17, .49] | [.26, .57] | [.09,.42] | [.15, .46] | [.11, .43] | [.14, .46] | [.08, .41] |
| *j*: Morality 🡪Effic | **.26** | **.29** | **.27** | **.30** | **.26** | **.31** | **.26** | **.30** | **.26** | **.28** | **.22** | **.28** | **.15** | **.22** |
| (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) | (.04) |
| [.18, .35] | [.22, .37] | [.19, .35] | [.22, .37] | [.17, .34] | [.23, .39] | [.18, .34] | [.22, .37] | [.17, .34] | [.21, .36] | [.13, .30] | [.20, .36] | [.06, .23] | [.14, .29] |
| *k:* Morality 🡪Coll Act | .05 | -.09 | .05 | **-.10** | .06 | -.08 | .06 | -.09 | .05 | -.10 | .05 | **-.11** | .02 | **-.13** |
| (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) |
| [-.02, .13] | [-.19, .00] | [-.02, .12] | [-.19, -.00] | [-.02, .14] | [-.18, .01] | [-.00, .13] | [-.18, .00] | [-.03, .12] | [-.19, .00] | [-.03, .12] | [-.20, .02] | [-.05, .10] | [-.23, -.04] |
| *l:* Anger 🡪Coll Act | .03 | -.02 | .03 | -.02 | .04 | -.01 | .03 | -.02 | .03 | -.01 | .03 | -.02 | **.17** | -.03 |
| (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.03) | (.03) |
| [-.01, .07] | [-.07, .03] | [-.01, .07] | [-.07, .03] | [-.01, .09] | [-.06, .04] | [-.01, .07] | [-.07, .03] | [-.02, .07] | [-.07, .04] | [.02, .07] | [-.07, .03] | [.10, .23] | [-.08, .02] |
| *m:* Effic 🡪Coll Act | -.04 | .01 | -.03 | -.02 | -.05 | .02 | -.03 | .02 | -.04 | .02 | -.04 | .01 | -.07 | -.05 |
| (.04) | (.05) | (.03) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.06) |
| [-.12, .04] | [-.09, .12] | [-.11, .04] | [-.09, .13] | [-.13, .03] | [-.09, .13] | [-.11, .05] | [-.09, .13] | [-.12, .04] | [-.09, .13] | [-.12, .04] | [-.10, .12] | [-.15, .01] | [-.16, .06] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 9**

*Indirect Effects for the Models Non-Normative Collective Action; Morality represented by Social Dominance Orientation*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *i*: Antecedent🡪 Ident 🡪 Coll Act | .04 | **.09** | **.02** | **.03** | **.04** | **.08** | **.02** | **.02** | **.06** | **.10** | **.05** | **.09** | **.05** | .07 |
| (.02) | (.04) | (.01) | (.02) | (.02) | (.04) | (.01) | (.01) | (.02) | (.04) | (.01) | (.04) | (.02) | (.04) |
| [.01, .07] | [.02, .18] | [.01, .03] | [.01, .07] | [.02, .08] | [.02, .16] | [.01, .04] | [.00, .05] | [.03, .10] | [.03, .20] | [.02, .07] | [.02, .17] | [.14, .32] | [-.01, .16] |
| *ii*: Antecedent🡪 Morality 🡪 Coll Act | .00 | -.02 | .00 | **-.01** | .02 | -.04 | .00 | -.00 | .02 | **-.07** | .02 | **-.05** | .01 | -.06 |
| (.01) | (.02) | (.00) | (.01) | (.01) | (.03) | (.00) | (.01) | (.02) | (.03) | (.01) | (.02) | (.02) | (.02) |
| [-.01, .02] | [-.06, .01] | [-.00, .01] | [-.03, -.00] | [-.00, .04] | [-.11, .01] | [-.00, .01] | [-.01, .01] | [-.01, .05] | [-.14, -.00] | [-.01, .05] | [-.10, -.01] | [-.02, .04] | [-.11, -.02] |
| *iii*: Antecedent🡪 Anger 🡪 Coll Act | -.01 | -.00 | -.00 | -.00 | .01 | -.00 | -.00 | .00 | .01 | -.00 | .01 | -.01 | .01 | -.01 |
| (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) |
| [-.03, .01] | [-.03, .01] | [-.00, .00] | [-.01, .00] | [-.00, .02] | [-.02, .01] | [-.01, .00] | [-.01, .01] | [-.00, .02] | [-.03, .01] | [-.00, .03] | [-.03, .01] | [-.01, .02] | [-.03, .01] |
| *iv*: Antecedent🡪 Effic 🡪 Coll Act | .00 | .00 | .00 | -.00 | .00 | .00 | .00 | -.00 | -.00 | .00 | -.01 | .00 | -.01 | -.01 |
| (.01) | (.01) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.01) | (.00) | (.01) | (.00) | (.01) | (.01) |
| [-.01, .02] | [-.01, .02] | [-.00, .01] | [-.00, .00] | [-.00, .01] | [-.00, .01] | [-.00, .01] | [-.01, .01] | [-.02, .00] | [-.01, .01] | [-.02, .00] | [-.01, .01] | [-.04, .00] | [-.04, .01] |
| *v:* Antecedent🡪 Ident 🡪 Anger 🡪 Coll Act | .01 | -.01 | .00 | -.00 | .01 | -.00 | .01 | -.00 | .01 | -.01 | .01 | -.01 | .01 | -.01 |
| (.01) | (.02) | (.00) | (.01) | (.01) | (.01) | (.01) | (.00) | (.01) | (.02) | (.01) | (.02) | (.01) | (.02) |
| [-.00, .03] | [-.05, .02] | [-.00, .01] | [.02, .01] | [-.00, .03] | [-.03, .02] | [-.00, .02] | [-.01, .01] | [-.00, .03] | [-.05, .02] | [-.00, .02] | [-.05, .01] | [-.01, .02] | [-.05, .01] |
| *vi:* Antecedent🡪 Ident 🡪 Effic 🡪 Coll Act | -.01 | .01 | -.00 | .00 | -.01 | .01 | -.01 | .01 | -.01 | .01 | -.01 | .00 | -.02 | -.02 |
| (.01) | (.02) | (.00) | (.01) | (.01) | (.02) | (.01) | (.01) | (.01) | (.03) | (.01) | (.02) | (.01) | (.02) |
| [-.03, .01] | [-.04, .05] | [-.00, .00] | [-.02, .02] | [-.05, .01] | [-.03, .05] | [-.02, .01] | [-.01, .02] | [-.05, .01] | [-.04, .06] | [-.03, .01] | [-.04, .05] | [-.04, .00] | [-.07, .02] |
| *vii:* Antecedent🡪 Morality 🡪 Anger 🡪 Coll Act | .00 | -.00 | .00 | -.00 | .00 | -.00 | .00 | -.00 | .01 | -.00 | .00 | -.00 | .00 | -.00 |
| (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.01) | (.00) | (.00) | (.00) | (.00) |
| [-.00, .01] | [-.01, .00] | [-.00, .00] | [-.00, .00] | [-.00, .01] | [-.01, .01] | [-.00, .00] | [-.00, .00] | [-.00, .01] | [-.01, .01] | [-.00, .01] | [-.01, .00] | [-.00, .01] | [-.01, .00] |
| *viii:* Antecedent🡪 Morality 🡪 Effic 🡪 Coll Act | -.00 | .00 | **-**.00 | .00 | -.00 | .00 | -.00 | .00 | -.00 | .00 | -.00 | .00 | -.00 | -.01 |
| (.00) | (.00) | (.00) | (.00) | (.00) | (.01) | (.00) | (.00) | (.01) | (.01) | (.00) | (.01) | (.00) | (.01) |
| [-.01, .00] | [-.00, .01] | [-.00, .00] | [-.00, .00] | [-.01, .00] | [-.01, .02] | [-.00, .00] | [-.00, .00] | [-.02, .00] | [-.01, .02] | [-.01, .00] | [-.01, .01] | [-.01, .00] | [-.02, .01] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 10**

*Unstandardized Coefficients and 95% Bootstrapped Confidence Intervals for Paths in the Models; Non-Normative Collective Action; Morality represented by Right-Wing Authoritarianism*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *a*: Antecedent🡪 Ident | **.44** | **.73** | **.22** | **.31** | **.59** | **.65** | **.36** | **.19** | **.75** | **.84** | **.53** | **.76** | **.72** | **.85** |
| (.18) | (.18) | (.05) | (.06) | (.06) | (.09) | (.06) | (.07) | (.08) | (.10) | (.05) | (.05) | (.04) | (.03) |
| [.07, .80] | [.38, 1.09] | [.13, .31] | [.20, .42] | [.46, .73] | [.48, .81] | [.25, .48] | [.06, .32] | [.60, .90] | [.64, 1.03] | [44, .63] | [.66, .86] | [.65, .80] | [.78, .92] |
| *b*: Antecedent🡪 Morality | -.04 | .07 | .04 | .01 | **.10** | **.22** | **.09** | -.07 | **.41** | **.67** | **.25** | **.34** | **.31** | **.52** |
| (.10) | (.13) | (.03) | (.04) | (.04) | (.06) | (.03) | (.05) | (.04) | (.07) | (.03) | (.04) | (.03) | (.03) |
| [-.24, .16] | [-.19, .32] | [-.02, .09] | [-.07, .08] | [.02, .18] | [.10, .34] | [.03, .16] | [-.16, .03] | [.32, .49] | [.54, .80] | [.19, .30] | [.26, .42] | [.26, .36] | [.46, .57] |
| *c*: Antecedent🡪 Anger | -.19 | .22 | -.00 | .10 | **.23** | **.34** | -.09 | -.01 | **.26** | **.42** | **.38** | **.33** | **.39** | **.36** |
| (.18) | (.19) | (.05) | (.06) | (.08) | (.09) | (.06) | (.07) | (.09) | (.11) | (.06) | (.07) | (.07) | (.09) |
| [-.56, .17] | [-.15, .59] | [-.09, .09] | [-.02, .21] | [.07, .38] | [.16, .53] | [-.21, .04] | [-.15, .12] | [.07, .45] | [.19, .65] | [.26, .50] | [.18, .48] | [.25, .53] | [.19, .54] |
| *d*: Antecedent🡪 Effic | -.11 | -.15 | -.03 | .02 | .00 | **.10** | **-.10** | .01 | .05 | .07 | **.14** | **.11** | **.27** | **.24** |
| (.10) | (.09) | (.03) | (.03) | (.04) | (.04) | (.03) | (.03) | (.05) | (.05) | (.03) | (.03) | (.04) | (.04) |
| [-.31, .08] | [-.02, .32] | [-.08, .02] | [-.03, .08] | [-.08, .08] | [.01, .19] | [-.16, -.03] | [-.05, .07] | [-.05, .15] | [-.04, .18] | [.07, .20] | [.04, .18] | [.20, .35] | [.16, .32] |
| *e:* Antecedent🡪 Coll Act | .07 | .19 | **.05** | **.07** | .01 | **-.11** | **.06** | **.11** | .03 | -.07 | .02 | .05 | **.08** | .17 |
| (.08) | (.10) | (.02) | (.03) | (.04) | (.05) | (.03) | (.04) | (.04) | (.06) | (.03) | (.04) | (.03) | (.05) |
| [-.09, .23] | [-.01, .39] | [.01, .09] | [.01, .13] | [-.06, .08] | [-.21, -.01] | [.01, .12] | [.04, .18] | [-.05, .11] | [-.19, .05] | [-.04, .07] | [-.03, .13] | [.01, .15] | [.07, .27] |
| *f:* Ident 🡪Anger | **.75** | **.83** | **.75** | **.82** | **.66** | **.78** | **.76** | **.85** | **.70** | **.81** | **.62** | **.72** | **.55** | **.67** |
| (.05) | (.06) | (.05) | (.06) | (.06) | (.06) | (.05) | (.06) | (.05) | (.05) | (.05) | (.06) | (.06) | (.07) |
| [.65, .85] | [.72, .94] | [.65, .85] | [.71, .94] | [.55, .78] | [.67, .89] | [.66, .86] | [.74, .96] | [.60, .80] | [.70, .92] | [.52, .72] | [.60, .84] | [.43, .67] | [.53, .81] |
| *g:* Ident 🡪Effic | **.52** | **.68** | **.53** | **.67** | **.53** | **.65** | **.54** | **.68** | **.51** | **.67** | **.48** | **.64** | **.38** | **.56** |
| (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) | (.03) |
| [.47, .58] | [.62, .73] | [.47, .58] | [.62, .73] | [.47, .59] | [.60, .71] | [.49, .59] | [63, .73] | [.46, .57] | [.62, .72] | [.42, .53] | [.58, .69] | [.32, .45] | [.50, .62] |
| *h:* Ident 🡪Coll Act | **.09** | **.11** | **.08** | **.11** | **.08** | **.12** | **.07** | **.10** | **.09** | **.12** | **.09** | **.11** | **.07** | .08 |
| (.03) | (.05) | (.03) | (.05) | (.04) | (.05) | (.03) | (.05) | (.03) | (.05) | (.03) | (.05) | (.03) | (.05) |
| [.03, .15] | [.01, .21] | [.01, .14] | [.01, .21] | [.01, .16] | [.03, .22] | [.01, .14] | [.00, .20] | [.02, .15] | [.02, .22] | [.03, .15] | [.01, .21] | [.01, .14] | [-.02, .18] |
| *i:* Morality 🡪Anger | **.36** | .14 | **.38** | .15 | **.42** | .14 | **.38** | .12 | **.31** | -.04 | **.23** | .09 | .18 | -.04 |
| (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.09) | (.08) | (.09) | (.09) |
| [.18, .53] | [-.02, .29] | [.21, .55] | [-.01, .30] | [.24, .60] | [-.02, .29] | [.21, .56] | [-.03, .28] | [.12, .49] | [-.12,.20] | [.06, .40] | [-.06, .24] | [-.00, .36] | [-.22, .13] |
| *j*: Morality 🡪Effic | **.27** | **.29** | **.26** | **.29** | **.23** | **.29** | **.27** | **.29** | **.25** | **.27** | **.21** | **.28** | **.12** | **.18** |
| (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) | (.05) | (.04) |
| [.17, .36] | [.22, .36] | [.17, .36] | [.22, .37] | [.18, .38] | [.22, .37] | [.18, .36] | [.22, .36] | [.15, .35] | [.20, .35] | [.12, .31] | [.21, .35] | [.03, .22] | [.10, .25] |
| *k:* Morality 🡪Coll Act | **.08** | .04 | **.08** | .05 | .08 | .03 | .07 | .05 | .07 | .04 | .08 | .03 | .05 | -.03 |
| (.04) | (.05) | (.04) | (.05) | (.05) | (.05) | (.04) | (.04) | (.04) | (.05) | (.04) | (.04) | (.04) | (.05) |
| [.00, .16] | [-.05, .13] | [.00, .16] | [-.04, .13] | [-.01, .17] | [-.06, .12] | [-.01, .15] | [-.04, .14] | [-.01, .15] | [-.05, .13] | [-.00, .16] | [-.06, .12] | [-.03, .13] | [-.13, .06] |
| *l:* Anger 🡪Coll Act | .03 | -.03 | .03 | -.03 | .03 | -.02 | .03 | -.02 | .03 | -.02 | .03 | -.03 | .02 | -.04 |
| (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) | (.02) | (.03) |
| [-.01, .07] | [.08, .02] | [-.01, .07] | [-.08, .02] | [-.01, .08] | [-.07, .04] | [-.01, .07] | [-.07, .03] | [-.01, .07] | [-.07, .03] | [-.02, .07] | [-.08, .02] | [-.02, .06] | [-.08, .01] |
| *m:* Effic 🡪Coll Act | -.04 | -.04 | -.03 | -.04 | -.05 | -.02 | -.03 | -.03 | -.04 | -.03 | -.05 | -.04 | -.07 | -.08 |
| (.04) | (.06) | (.04) | (.05) | (.04) | (.06) | (.04) | (.05) | (.04) | (.06) | (.04) | (.06) | (.04) | (.06) |
| [-.12, .04] | [-.15, .07] | [-.11, .04] | [-.14, .07] | [-.13, .03] | [-.13, .08] | [-.11, .04] | [-.14, .07] | [-.12, .03] | [-.14, .08] | [-.12, .03] | [-.15, .07] | [-.15, .01] | [-.19, .03] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.

**Table 11**

*Indirect Effects for the Models Non-Normative Collective Action; Morality represented by Right-Wing Authoritarianism*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Contact | | | | | | Knowledge | | | | | | | |
|  | 1. C-G friendship  *b(se)*  [CI] | | 2. Quantity  *b(se)*  [CI] | | 3. Quality  *b(se)*  [CI] | | 4. Self-report  *b(se)*  [CI] | | 5. Factual  *b(se)*  [CI] | | 6. Isolated racism  *b(se)*  [CI] | | 7. Systemic racism  *b(se)*  [CI] | |
| Path | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. | Can | U.S. |
| *i*: Antecedent🡪 Ident 🡪 Coll Act | .04 | **.08** | **.02** | **.03** | **.05** | **.08** | **.03** | **.02** | **.07** | **.10** | **.05** | **.08** | **.05** | .07 |
| (.02) | (.04) | (.01) | (.02) | (.02) | (.03) | (.01) | (.01) | (.02) | (.04) | (.01) | (.04) | (.02) | (.04) |
| [.01, .08] | [.02, .18] | [.01, .03] | [.00, .07] | [.02, .09] | [.02, .16] | [.01, .05] | [.00, .05] | [.03, .11] | [.03, .20] | [.02, .08] | [.02, .17] | [.02, .09] | [-.01, .15] |
| *ii*: Antecedent🡪 Morality 🡪 Coll Act | -.00 | -.00 | .00 | .00 | .01 | .01 | **.01** | -.00 | .03 | .03 | .02 | .01 | .02 | -.02 |
| (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.00) | (.00) | (.02) | (.03) | (.01) | (.02) | (.01) | (.02) |
| [-.02, .02] | [-.01, .02] | [-.00, .00] | [-.01, .01] | [-.00, .02] | [-.01, .03] | [.00, .02] | [-.01, .00] | [.00, .06] | [-.03, .08] | [-.00, .04] | [-.10, -.01] | [-.01, .04] | [-.07, -.03] |
| *iii*: Antecedent🡪 Anger 🡪 Coll Act | -.01 | -.01 | -.00 | -.00 | .01 | -.01 | -.00 | .00 | .01 | -.01 | .01 | -.01 | .01 | -.01 |
| (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.00) | (.00) | (.01) | (.01) | (.01) | (.01) | (.01) | (.01) |
| [-.03, .01] | [-.03, .01] | [-.00, .00] | [-.01, .00] | [-.00, .02] | [-.03, .01] | [-.01, .00] | [-.01, .01] | [-.00, .02] | [-.04, .01] | [-.00, .03] | [-.03, .01] | [-.01, .02] | [-.04, .01] |
| *iv*: Antecedent🡪 Effic 🡪 Coll Act | .00 | -.01 | .00 | -.00 | -.00 | -.00 | .00 | -.00 | -.00 | -.00 | -.01 | -.00 | -.02 | -.02 |
| (.01) | (.01) | (.00) | (.00) | (.00) | (.01) | (.00) | (.00) | (.00) | (.00) | (.01) | (.01) | (.01) | (.01) |
| [-.01, .02] | [-.02, .01] | [-.00, .00] | [-.01, .00] | [-.01, .01] | [-.01, .01] | [-.00, .01] | [-.01, .00] | [-.01, .00] | [-.01, .01] | [-.02, .00] | [-.01, .01] | [-.01, .03] | [-.05, .00] |
| *v:* Antecedent🡪 Ident 🡪 Anger 🡪 Coll Act | .01 | -.02 | .00 | -.01 | **.02** | -.00 | .01 | -.00 | .01 | -.01 | .01 | -.02 | .01 | -.02 |
| (.01) | (.02) | (.00) | (.01) | (.01) | (.02) | (.01) | (.00) | (.01) | (.02) | (.01) | (.02) | (.01) | (.02) |
| [-.00, .03] | [-.06, .02] | [-.00, .01] | [.02, .01] | [.0, .04] | [-.04, .02] | [-.00, .02] | [-.02, .01] | [-.01, .04] | [-.05, .02] | [-.00, .02] | [-.05, .01] | [-.04, .00] | [-.06, .01] |
| *vi:* Antecedent🡪 Ident 🡪 Effic 🡪 Coll Act | -.01 | -.02 | -.00 | -.01 | -.02 | -.01 | -.01 | -.00 | -.02 | -.02 | -.01 | -.02 | -.02 | -.04 |
| (.01) | (.02) | (.00) | (.01) | (.01) | (.02) | (.01) | (.01) | (.01) | (.03) | (.01) | (.02) | (.01) | (.02) |
| [-.04, .01] | [-.07, .02] | [-.02, .00] | [-.03, .01] | [-.05, .01] | [-.05, .03] | [-.03, .01] | [-.02, .01] | [-.05, .01] | [-.07, .03] | [-.03, .01] | [-.04, .05] | [-.04, .00] | [-.09, .00] |
| *vii:* Antecedent🡪 Morality 🡪 Anger 🡪 Coll Act | -.00 | -.00 | .00 | .00 | **.00** | -.00 | .00 | .00 | .00 | -.00 | .00 | -.00 | .00 | .00 |
| (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) |
| [-.00, .00] | [-.00, .00] | [-.00, .00] | [-.00, .00] | [.00, .01] | [-.00, .00] | [.00, .00] | [-.00, .00] | [-.00, .01] | [-.01, .00] | [-.00, .01] | [-.01, .00] | [-.00, .00] | [-.00, .01] |
| *viii:* Antecedent🡪 Morality 🡪 Effic 🡪 Coll Act | .00 | -.00 | **-**.00 | -.00 | -.00 | -.00 | -.00 | .00 | -.00 | -.01 | -.00 | -.00 | -.00 | -.01 |
| (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.00) | (.01) | (.00) | (.00) | (.00) | (.00) |
| [-.00, .00] | [-.01, .00] | [-.00, .00] | [-.00, .00] | [-.01, .00] | [-.01, .00] | [.00, .00] | [-.00, .00] | [-.02, .00] | [-.02, .01] | [-.01, .00] | [-.01, .01] | [-.01, .00] | [-.02, .00] |

*Note*. CI= 95% bootstrapped confidence interval. Effects in **bold** are significant at *p*<.05. C-G friendship = cross-group friendship, Ident = identification, Effic = efficacy, Coll Act = collective action.