Supplementary Materials

The Good, the Bad, and the Central of Group Identification: Evidence of a U-shaped Quadratic Relation between Ingroup Affect and Identity Centrality

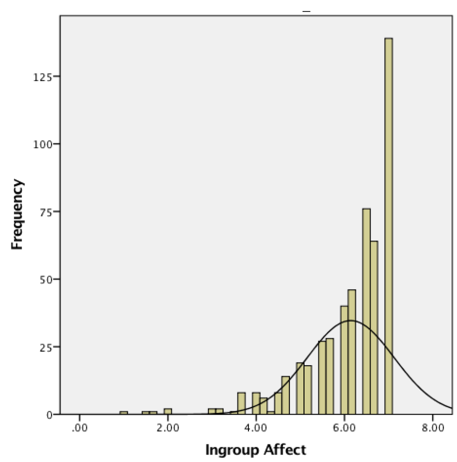
1. Statistical Outliers and Skewness by Study

Study 1A (Cultural Identification- Canadian Undergraduate Students)

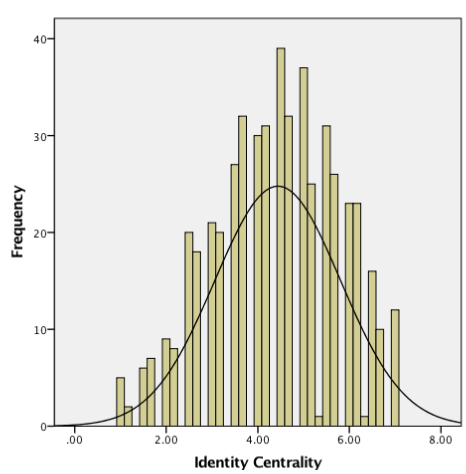
Outliers: 16 cases out of 512 (3%) cases had standardized residuals greater or less than 2, which was within normal limits of 5 % which would be expected from a ordinary sample. No cases had a Cook's distance greater than 1, thus, no cases appeared to have an undue influence on the data.

Skewness of Data:

Ingroup Affect: *Skew* = -1.75, *SE* = .11*, Z* = -16.19*, p <.05*



Ingroup Centrality: *Skew* = -.24*, SE*=.11*, Z = -2.22, p <.05*

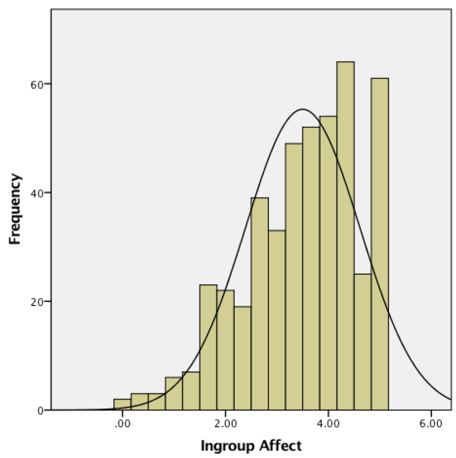


Study 1B (Ethnic Identity, Canadian Community Sample)

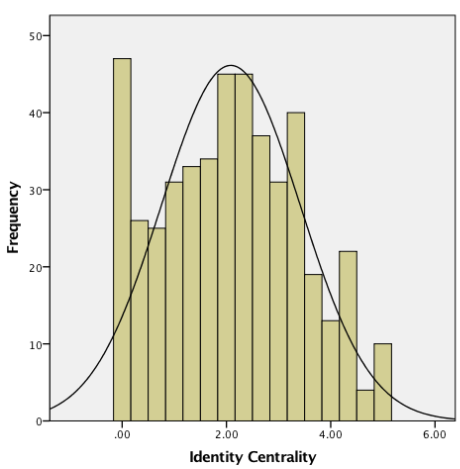
Outliers: 14 cases out of 462 (3%) cases had standardized residuals greater or less than 2, which was within normal limits of 5 % which would be expected from a ordinary sample. No cases had a Cook's distance greater than 1, thus, no cases appeared to have an undue influence on the data.

Skewness:

Ingroup Affect: *Skew* = -.632, *SE* = .11, *Z* = -5.85, *p* <.05



Ingroup Centrality: *Skew* = .14, *SE*=.11, *Z = 1.30, p >.05*

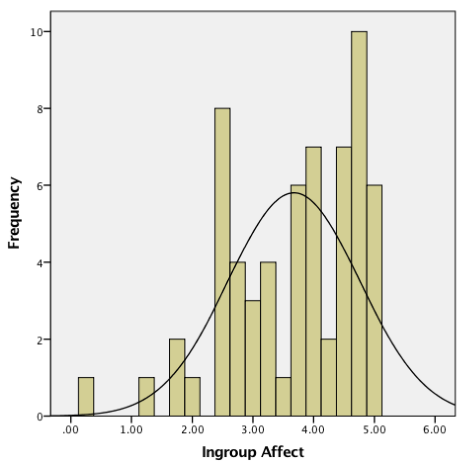


Study 1C (Religious Identity – Canadian Undergraduate Sample)

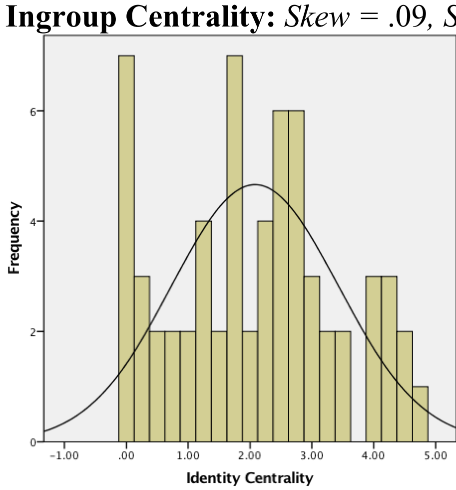
Outliers: With respect to potential outliers, 1 case out of 63 cases (2%) had a standardized residual greater or less than 2, which was within normal limits of 5 % expected from an ordinary sample. However, 1 case had a Cook's distance greater than 1.
We repeated our regression analyses excluding for this exceptional cases. We still found evidence of a quadratic relation between ingroup affect and identity centrality with regard to religious identification. Hierarchal linear regression revealed a significant linear relation between ingroup affect and identity centrality when ingroup affect was entered into the model alone, $B=.81$, $\beta=.58$, $t(60)=5.75$, $p<.001$, $R^2=.35$. The squared value of ingroup affect also accounted for significant variance in identity centrality when it was included into the regression model, $B=.54$, $\beta=.43$, $t(59)=4.16$, $p<.001$. Although the linear effect of ingroup affect remained significant, $B=1.07$, $\beta=.79$, $t(59)=7.66$, $p=.001$, our findings indicated that the regression model including both ingroup affect and the squared value of ingroup affect best accounted for participants' level of identity centrality, $F(1,59)_{change}=17.27$, $p<.001$, $R^2_{change}=.15$, $f^2=.27$.

Skewness:

Ingroup Affect: $Skew = -.78$, $SE = .30$, $Z = -2.60$, $p < .05$



Ingroup Centrality: $Skew = .09$, $SE=.30$, $Z = .30$, $p > .05$

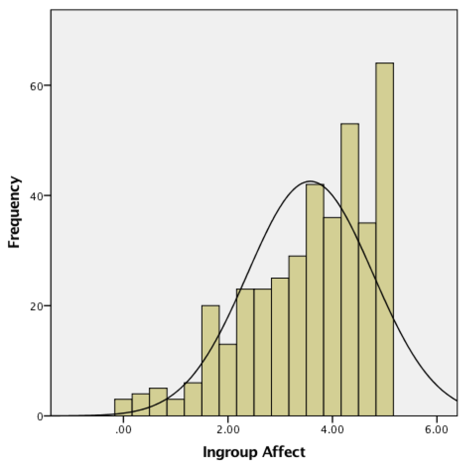


Study 1D (Religious Identity – Canadian Community Sample)

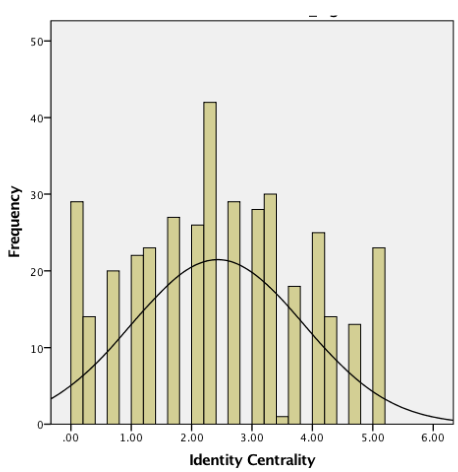
Outliers: With respect to potential outliers, 13 cases out of 384 cases (3%) had a standardized residual greater or less than 2, which was within normal limits of 5 % expected from an ordinary sample. No cases had a Cook's distance greater than 1, thus, no cases appeared to have an undue influence on the data.

Skewness:

Ingroup Affect: *Skew* = -.78, *SE* = .13, *Z* = -6.0, *p <.05*



Ingroup Centrality: *Skew* = .03, *SE*=.13, *Z = .23, p <.05*

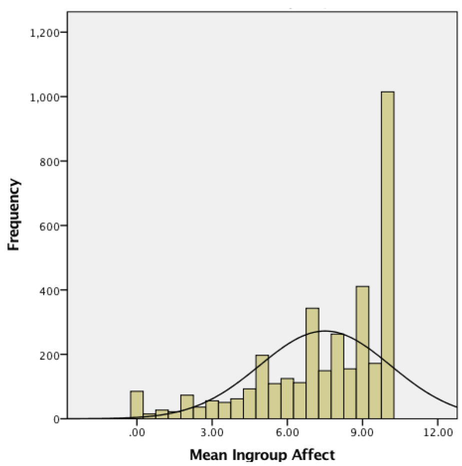


Study 2A (Racial Identity –2006 South African Community Sample)

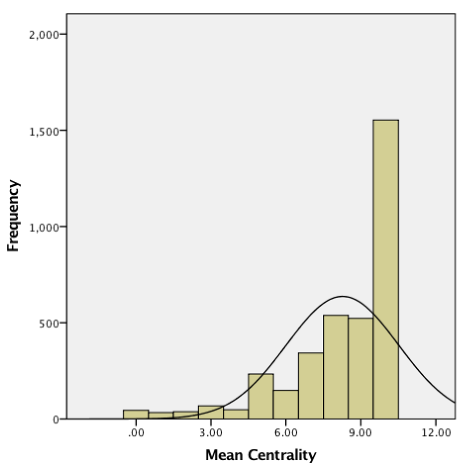
Outliers: With respect to potential outliers, 193 cases out of 3571 cases (5%) had a standardized residual greater or less than 2, which was within normal limits of 5 % expected from an ordinary sample. No cases had a Cook's distance greater than 1, thus, no cases appeared to have an undue influence on the data.

Skewness:

Ingroup Affect: *Skew* = -1.09, *SE* = .04, *Z* = -27.25, *p* <.05



Ingroup Centrality: *Skew* = -1.58, *SE*=.04, *Z* = *-39.50, p <.05*

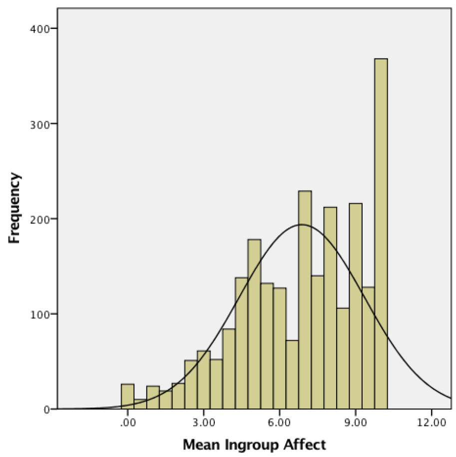


Study 2B (Racial Identity – 2010 South African Community Sample)

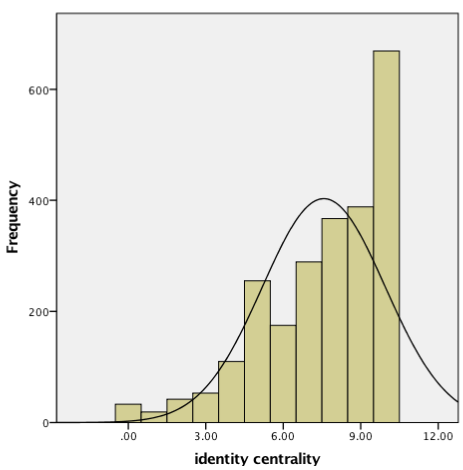
Outliers: With respect to potential outliers, 111 cases out of 2400 cases (5%) had a standardized residual greater or less than 2, which was within normal limits of 5 % expected from an ordinary sample. No cases had a Cook's distance greater than 1, thus, no cases appeared to have an undue influence on the data.

Skewness:

Ingroup Affect: *Skew* = -.575, *SE* = .05, *Z* = -11.50, *p <.05*



Ingroup Centrality: *Skew* = -.98, *SE*=.05, *Z = -19.60, p <.05*



2. Uniqueness of Quadratic Relation Between Ingroup Affect and Identity Centrality

Aside from ingroup affect and identity centrality another important dimension of group identification that is included in most conceptualizations of group identification is *ingroup ties*- the extent to which group members feel close connections to other group members. Ingroup ties has been found to be positively and linearly associated with ingroup affect and identity centrality (e.g. Cameron, 2004; Leach et al., 2008; Roccas et al., 2008). To our knowledge, there is little theoretical rationale to suggest that those with few social group connections would necessarily centralize their identity in the same way as those with negative ingroup affect. In the absence of a compelling theoretical rationale, we would not expect quadratic relations between ingroup ties and ingroup affect, or between ingroup ties and identity centrality. In studies 1A-1D we measured participants' ingroup ties. Thus, to establish whether a quadratic relation would be *unique* to ingroup affect and identity centrality, we also tested the presence of a quadratic relation between ingroup affect and identity centrality. Insuring that the quadratic relation is unique to ingroup affect and identity centrality was important as it would help give us confidence that any evidence of a quadratic relation between ingroup affect and identity centrality was not due to biases in our methodology or biases in our statistical analyses.

Study 1A (Cultural Identification- Canadian Undergraduate Students)

Ingroup ties was assessed with 4 items, for example: "I feel strong ties to other members of my (*cultural*) group" (α_{ties}=.77) and were rated with a 7-point scale anchored at "1" Strongly Disagree and "7" Strongly Agree. We tested the quadratic relation between ingroup affect and ingroup ties as well as the quadratic relation between ingroup ties and identity centrality. In contrast to the relation between ingroup affect and identity centrality, we did not expect there to be any quadratic relation between these variables. There was a significant and positive linear relation between ingroup affect and ingroup ties when ingroup affect was included in the model alone, β=.48, $t(510)$=12.28, p<.001, R^2=.23, and when ingroup affect was included with the squared value of ingroup affect, β=.55, $t(509)$=9.80, p<.001. However as expected, the quadratic effect of ingroup affect on ingroup ties was non-significant, β=.10, $t(509)$=1.72, p=.09, $F(1,509)_{change}$=2.97, p=.09, R^2_{change}=.005. Similarly, there was a significant relation between ingroup ties and identity centrality when ingroup ties was included in the model alone, β=.27, $t(510)$=6.43, p<.001, R^2=.08, and when it was included with the squared value of ingroup ties, β=.32, $t(509)$=6.32, p<.001. However, the quadratic effect of ingroup ties on ingroup centrality was non-significant, β=.08, $t(509)$=1.66, p=.10, $F(1,509)_{change}$=2.77, p=.10, R^2_{change}=.005. Importantly, we repeated these regressions with the different sub-samples, and found consistent results in each case.

Study 1B (Ethnic Identity, Canadian Community Sample)

Ingroup ties was assessed with 4 items from Cameron (2004) (α_{ties}=.77) and were rated with a 6-point scale anchored at “0” Strongly Disagree and “5” Strongly Agree. There was a significant positive linear relation between ingroup affect and ingroup ties when ingroup ties was included in the model alone, β=.66, t(460)=18.77, p<.001, R^2=.43, and when it was included with the quadratic value of ingroup affect, β=.66, t(459)=16.61, p<.001. As expected, however, the quadratic effect of ingroup affect on ingroup ties was not significant, β=.00, t(459)=-.04, p=.97 , $F(1,459)_{change}$=.00, p=.97, R^2_{change}=.00. Similarly, there was a significant linear relation between ingroup ties and identity centrality when ingroup ties was included into the model alone, β=.35, t(460)=8.01, p<.001, R^2=.12, and when it was included with the squared value of ingroup ties, β=.35, t(459)=7.58, p<.001. Furthermore, the quadratic effect of ingroup ties on identity centrality was non-significant, β=.01, t(459)=.11, p=.91, $F(1,459)_{change}$=.00, p=.91, R^2_{change}=.00.

Study 1C (Religious Identity – Canadian Undergraduate Sample)

Ingroup ties was assessed with 4 items from Cameron (2004) (α_{ties}=.66) and were rated with a 6-point scale anchored at “0” Strongly Disagree and “5” Strongly Agree. There was a significant and positive linear relation between ingroup affect and ingroup ties when ingroup affect was included in the model alone, β=.64, t(61)=6.42, p<.001, R^2=.40, and when it was included with the squared value of ingroup affect, β=.65, t(60)=5.57, p<.001. As expected, the quadratic effect of ingroup affect on ingroup ties was non-significant, β=.03, t(60)=.25, p=.80, $F(1,60)_{change}$=.96, p=.80, R^2_{change}=.00. There was also a significant linear relation between ingroup ties and identity centrality when ingroup ties was included in the model alone, β=.55, t(61)=5.13, p<.001,R^2=.30 and when it was included with the squared value of ingroup ties, β=.56, t(60)=5.09, p<.001. Also as expected, there was no significant quadratic effect of ingroup ties on identity centrality, $F(1,60)_{change}$=.13, p=.72, R^2_{change}=.00.

Study 1D (Religious Identity – Canadian Community Sample)

Ingroup ties was assessed with 4 items from Cameron (2004) (α_{ties}=.76) and were rated with a 6-point scale anchored at “0” Strongly Disagree and “5” Strongly Agree. There was a significant and positive linear relation between ingroup affect and ingroup ties when ingroup affect was included in the model alone, β=.71, t(382)=19.65, p<.001, R^2=.50, and when it was included with the squared value of ingroup affect, β=.73, t(381)=16.92, p<.001. As expected, there was no significant quadratic effect of ingroup affect on ingroup ties, β=.05, t(381)=1.05, p=.30, $F(1,381)_{change}$=1.09, p=.30, R^2_{change}=.00. Similarly, there was a significant relation between ingroup ties and identity centrality when ingroup ties was included in the model alone, β=.59, t(382)=14.42, p<.001, R^2=.35, and with the squared value of ingroup ties, β=.59, t(381)=13.40, p<.001. However, there was no significant quadratic effect of ingroup ties on identity centrality β=-.01, t(381)=-.24, p=.81, $F(1,381)_{change}$=.06, p=.81, R^2_{change}=.00.

3.Re-analysis of Study 2A and Study 2B including measure of group pride when computing ingroup affect

Beyond the two items which we used to compute ingroup affect in the paper, the survey contained one item that assessed racial pride "I am proud to be (*race)". While some measures of ingroup affect have included items that assess group pride (e.g. Ellemers, Kortekaas, & Ouwerkerk, 1999), identity theorists (e.g. Cameron, 2004; Jackson, 2002; Tajfel & Turner, 1979) have argued that ingroup pride relates to value dimension of group identification and is therefor separate from the affect which one feels towards their group membership. Given that our theoretical model concerns only basic ingroup affect, and that the measures used in our other samples (utilizing the Cameron (2004) scale) did not contain a measure of ingroup pride we did not include this item in our analyses. This said, we still wanted to gain insight as to whether or not including the pride item into our measure of ingroup affect would effect our results. As such for both South African data sets, we recomputed our key analyses testing the significance of the quadratic effect. We report these analyses below.

Study 2A: South African Community Sample (2006): Including the pride item into our measure of ingroup affect did not impact the significance of our results. There was a significant positive linear relation between ingroup affect and identity centrality when ingroup affect was entered into the model as a lone predictor variable, $B=.25$, $\beta=.23$, $t(3569)=14.21$, $p<.001$, $R^2=.05$. Importantly, however, the squared value of ingroup affect also accounted for significant variance in identity centrality when it was included into the regression model, $B=.07$, $\beta=.18$, $t(3568)=8.87$, $p<.001$. The linear effect of ingroup affect also remained significant, $B=.38$, $\beta=.35$, $t(3568)=16.75$, $p<.001$. Nonetheless, the regression model which included both the non-squared value of ingroup affect and the squared value of ingroup affect best accounted for participants' level of identity centrality, $F(1,3568)_{\text{change}}=78.72$, $p<.001$, $R^2_{change}=.02$, $f^2=.02$. As illustrated in the Table S1 the quadratic effect remained significant for all racial sub-groups.

Table SM1. Variance in Identity Centrality Accounted for by Ingroup Affect and (Ingroup Affect)^2 for Racial Groups in South Africa (Study 2A – When including pride item into measure of ingroup affect)

Race	F_{change} (Quadratic Effect)	Degrees of Freedom	Variance accounted for by Ingroup Affect (R^2)	Variance accounted for by (Ingroup Affect)^2 (R^2)	Cohen's f^2 (Quadratic Effect)
White	8.09**	1,459	.11	.02	.02
Black	45.83***	1,2523	.05	.02	.02
Colored	6.98**	1,439	.05	.02	.02
Asian/ Indian	8.45**	1,138	.09	.05	.06

**$p<.01$; ***$p<.001$

Study 2B: South African Community Sample (2010): Including the pride item into our measure of ingroup affect did not impact the significance of our results. There was a significant positive linear relation between ingroup affect and identity centrality when ingroup affect was entered into the model as a lone predictor variable, B=.39, β=.33, t(2397)=17.07, p<.001, R^2=.11. Importantly, however, the squared value of ingroup affect also accounted for significant variance in identity centrality when it was included into the regression model, B=.10, β=.16, t(2396)=8.13, p<.001. The linear effect of ingroup affect also remained significant, B=.44, β=.37, t(2396)=18.76, p<.001. Nonetheless, the regression model which included both the non-squared value of ingroup affect and the squared value of ingroup affect best accounted for participants' level of identity centrality, $F(1,2396)_{change}$=66.12, p<.001, R^2_{change}=.02, f^2=.02. As illustrated in Table S2, the quadratic effect remained significant for all of the racial sub-samples with the exception of Asian/Indian racial identity.

Table SM2. Variance in Identity Centrality Accounted for by Ingroup Affect and (Ingroup Affect)^2 for Racial Groups in South Africa (Study 2B – When including pride item into measure of ingroup affect)

Race	F_{change} (Quadratic Effect)	Degrees of Freedom	Variance accounted for by Ingroup Affect (R^2)	Variance accounted for by (Ingroup Affect)^2 (R^2)	Cohen's f^2 (Quadratic Effect)
White	10.73***	1,597	.06	.02	.02
Black	36.41***	1,1213	.14	.03	.03
Colored	19.12***	1,401	.09	.04	.05
Asian/ Indian	2.69	1,176	.25	.01	.01

**p<.01; ***p<.001

4. How to compute T-test for Simple Slope and the Minimum of the Curve

(Aiken and West, 1991)

In this section we provide a more detailed explanation and sample calculations for how to compute the simple slope and T-test for the significance of that slope given a specific value of X. We also explain how to find solve for the minimum of the curve - the point of the function in which the simple slope is equivalent to 0). In our examples we use data from Study 2B and we compute the simple slope at X = negative one standard deviations from the centered mean.

Simple Slope Computations:

Aiken and West (1991) describe that the quadratic function between Y and X can be represented by the following equation:

$$\mathbf{Y} = \boldsymbol{b_1}\mathbf{X} + \boldsymbol{b_2}\mathbf{X}^2 + \boldsymbol{b_0}$$

Aiken and West then describe that the simple slope of Y on X for any value of X is reflected by the first (partial) derivative of the overall regression equation.

$$\mathbf{dY/dX} = \boldsymbol{b_1} + \mathbf{2}\boldsymbol{b_2}\mathbf{X}$$

The significance of the simple slopes is tested using the following equations provided by Aiken and West (1991):

$$t = \frac{b_1 + 2b_2X}{\sqrt{S_{11} + 4XS_{12} + 4X^2S_{22}}}$$

And the variance/covariance matrix of the regression coefficients is reflected by:

$$S_b = \begin{bmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{bmatrix}$$

e.g from Study 2B

$$S_b = \begin{bmatrix} 0.000441 & 0.00006342 \\ 0.00006342 & 0.000049 \end{bmatrix}$$

$$t = \frac{(.303) + 2(.087)(-.247132)}{\sqrt{(0.000441) + 4(-.247132)(0.00006342) + 4(-.247132)^2(0.000049)}}$$

$$t = \frac{-0.127}{.032}$$

$$t = -3.94$$

Computing the Minimum of the Curve:

If the simple slope of the curve = dY/dX = $b_1 + 2b_2$X

Then the minimum of the curve can be solved in the following way:

dY/dX = $b_1 + 2b_2$X

0 = $b_1 + 2b_2$X

$$X = \frac{-b_1}{2b_2}$$

Using data from Study 2B we see that:

$$X = \frac{-.303}{(2)(.09)}$$

$$X = -1.74$$

5. How to Perform the Johnson-Neyman Technique for a Quadratic Function

In this section we provide a more detailed explanation for how to use the J-N technique to solve for the values of X where the simple slopes of the quadratic function cross the threshold of significance, given a critical value of *t (*i.e 1.96, for a two-tailed Z test when alpha = .05). Please see Miller, Stromeyer, and Schwieterman (2013) for a full explanation of this method, and a detailed account for how they derived their formula. While we provide sample calculations below, we used the excel macro created by Miller and colleagues to perform all computations used in the paper. This macro can be accessed from: //www.dropbox.com/sh/nqw1w40nujty38u/BceknMkfy8.

The two critical J-N values of X are important for determining the shape of the quadratic function. Once computed, the researcher can compare the 2 critical J-N values to the observable range of data for X and then the following conclusions can then be made:

- If neither of the critical J-N values falls within the observable range of X then the simple slope is either significant for all values of X or non-significant for all values of X. This would indicate that there is no significant quadratic effect, because the simple slope is *not* conditional on the value of X.
- If only one of the critical J-N values fall within the observable range of X then this indicates that the simple slope either goes from being significant to losing significance one time across the distribution or begins as being significant and then loses significance. This indicates a quadratic effect, yet not a U-shaped quadratic effect.
- If both of the critical J-N values fall within the observable range of X this indicates that the simple slope either: (1) goes from being significant to non-significant, and then returns to being significant again or (2) is non-significant, becomes significant, then returns to being non significant. It is when both critical JN values fall within the observable range of X that a U-shaped, or inverted U-shaped curve is indicated. This is because the simple slopes for U shaped or inverted U-shaped functions should be significant at the high and low end of the distribution, and non-significant at the middle of the distribution. To further determine whether the curve is an inverted-U/convex, or U-shaped/concave the sign of the beta coeffienct is informative. A positive coefficient indicates a U-shaped or concave function. Furthermore, the research will want to verify that the function is non-monotonic (Aiken & West, 1991)

To derive the formula for solving the two JN critical values Miller and colleagues (2013) begin by squaring the formula used to calculate the *t* statistic for the simple slope.

$$t_{crit} = \frac{b_1 + 2b_2X}{\sqrt{S_{11} + 4XS_{12} + 4X^2S_{22}}}$$

$$t_{crit}{}^2 = \frac{b_1{}^2 + 2b_1b_2X + 2b_1b_2X + 4b_2^2X^2}{S_{11} + 4XS_{12} + 4X^2S_{22}}$$

The authors then solve for X and derive the following formula where:

$$X = \frac{-(\mathrm{b}) \ \pm \sqrt{(\mathrm{b})^2 - 4(\mathrm{a})(\mathrm{c})}}{2(\mathrm{a})}$$

Where:

$$\mathrm{a} = 4t_{crit}^2 s_{22} - 4b_2^2$$

$$\mathrm{b} = 4t_{crit}^2 s_{12} - 4b_1 b_2$$

$$\mathrm{c} = t_{crit}^2 s_{11} - 4b_1^2$$

Using data from Study 2B we can compute the two critical values of X where the simple slope crosses the significance threshold:

$$\mathrm{a} = 4t_{crit}^2 s_{22} - 4b_2^2$$

$$\mathrm{a} = 4(1.966)^2(.000049) - 4(.087)^2$$

$$\mathrm{a} = -.02952$$

$$\mathrm{b} = 4t_{crit}^2 s_{12} - 4b_1 b_2$$

$$\mathrm{b} = 4(1.966)^2(.00006342) - 4(.303)(.087)$$

$$\mathrm{b} = -.10446$$

$$\mathrm{c} = t_{crit}^2 s_{11} - 4b_1^2$$

$$\mathrm{c} = (1.966)^2(.000441) - 4(.303)^2$$

$$\mathrm{c} = -.0901$$

$$X = \frac{-(\mathrm{b}) \ \pm \sqrt{(\mathrm{b})^2 - 4(\mathrm{a})(\mathrm{c})}}{2(\mathrm{a})} = \frac{-(-.10446) \ \pm \sqrt{(-.10446)^2 - 4(-.02952)(-.0901)}}{2(-.02952)}$$

$$\mathrm{X} = -1.48926 \text{ and } -2.04967$$

6. Detailed Results for Johnson-Neyman Technique

Using the excel macro created by Miller and colleagues (2013) we created visualizations of the quadratic relation between identity centrality over the observed range of ingroup affect as estimated by our regression coefficients. As well, we provide the Johnson-Neyman plot of the simple-slopes as a function of ingroup affect across the range of observable values of ingroup affect.

Study 1A (Cultural Identification- Canadian Undergraduate Students):

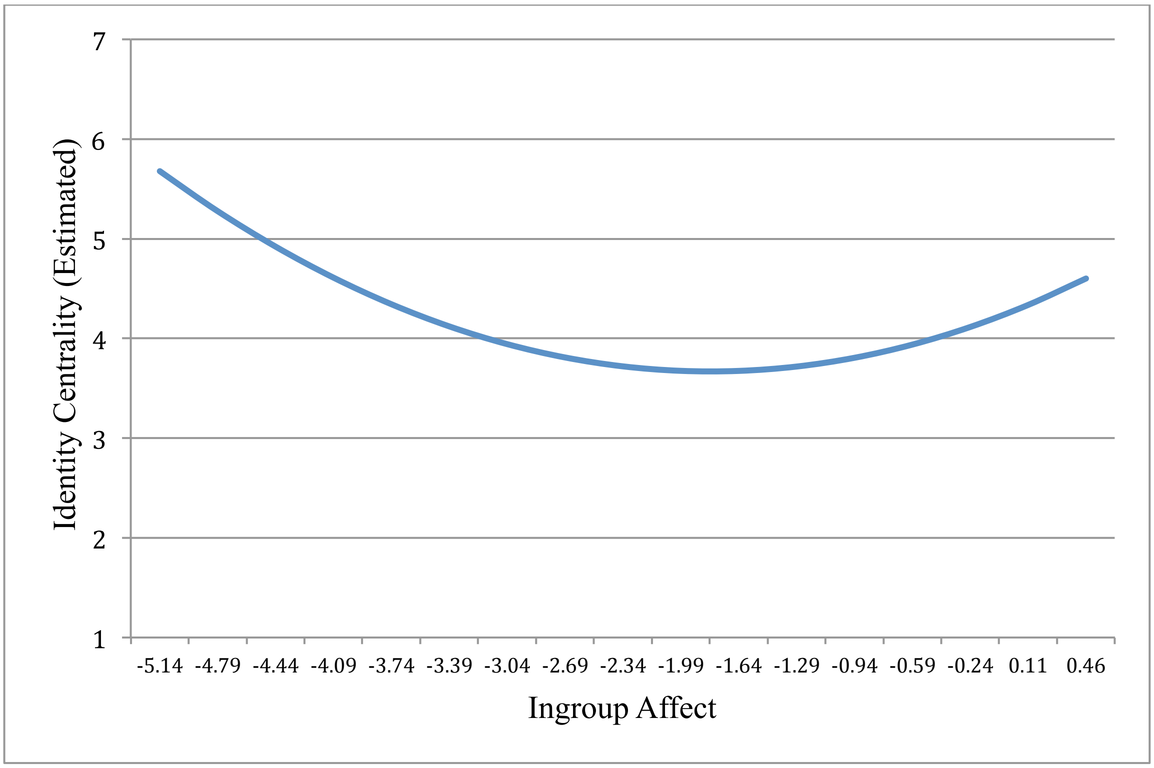


Figure SM1: Quadratic Relation Between Ingroup Affect and Identity Centrality. Approximated values of identity centrality are based on the regression coefficients from study 1A.

Y = (.67)X + (.18)X^2 + *4.26*

Value of X	Simple Slope	Standard Error	t-value	Lower 95% CI	Upper 95% CI
-5.14	-1.206	0.268	-4.507	-1.732	-0.680
-4.79	-1.079	0.246	-4.388	-1.562	-0.596
-4.44	-0.952	0.224	-4.245	-1.393	-0.511
-4.09	-0.826	0.203	-4.068	-1.225	-0.427
-3.74	-0.699	0.182	-3.845	-1.056	-0.342
-3.39	-0.572	0.161	-3.559	-0.888	-0.256
-3.04	-0.445	0.140	-3.178	-0.721	-0.170
-2.69	-0.319	0.120	-2.654	-0.555	-0.083
-2.34	-0.192	0.101	-1.904	-0.390	0.006
-1.99	-0.065	0.083	-0.786	-0.229	0.098
-1.64	0.061	0.068	0.900	-0.073	0.195
-1.29	0.188	0.058	3.255	0.074	0.302
-0.94	0.315	0.055	5.732	0.207	0.423
-0.59	0.441	0.061	7.284	0.322	0.561
-0.24	0.568	0.073	7.796	0.425	0.711
0.11	0.695	0.089	7.803	0.520	0.870
0.46	0.822	0.107	7.652	0.610	1.033

Table SM3. Simple slopes across the range of observed values of ingroup affect (X) (-5.14, .86). 95% confidence intervals which *do not* include 0 indicate a significant simple slope, at that value of ingroup affect.

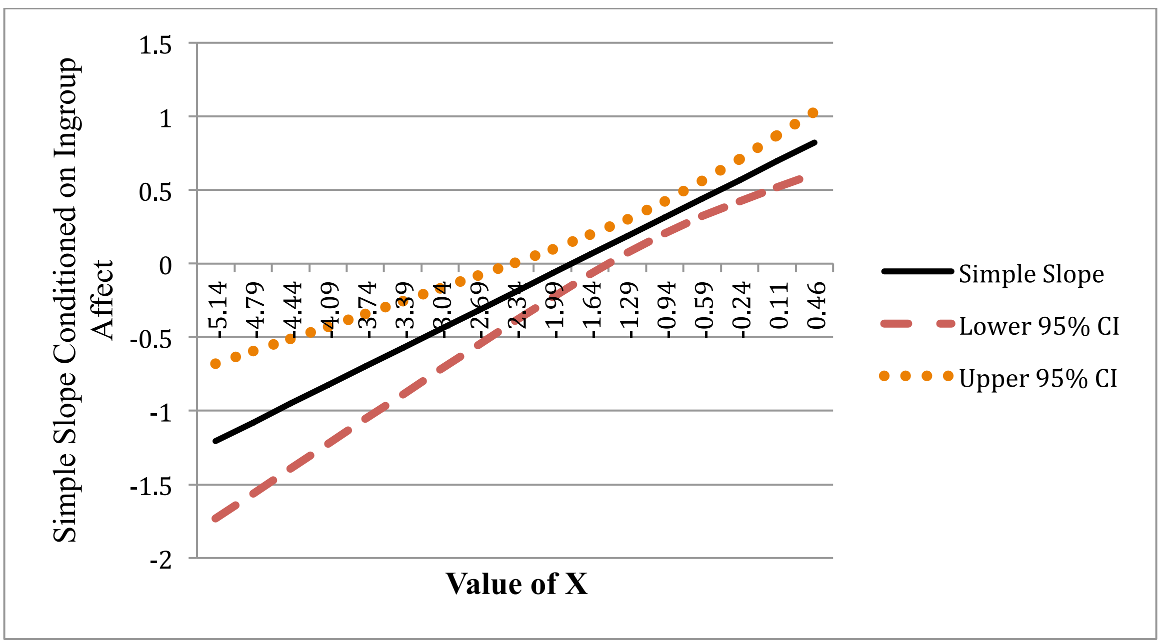


Figure SM2. Johnson-Neyman Plot for the Simple Slope of the Quadratic Relation Between Ingroup Affect and Identity Centrality (Study 1A).

Study 1B (Ethnic Identity, Canadian Community Sample)

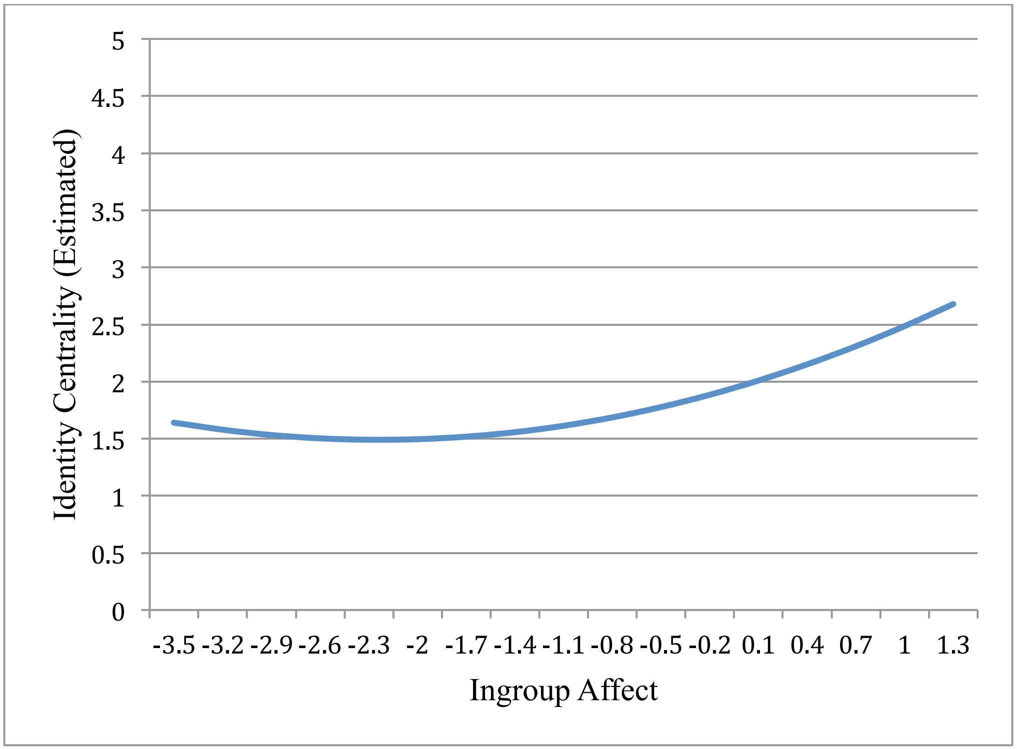


Figure SM3: Quadratic Relation Between Ingroup Affect and Identity Centrality. Approximated values of identity centrality are based on the regression coefficients for Study 1B:
$\mathbf{Y = (.43)X + (.10)X^2} + \boldsymbol{\mathit{1.97}}$

Value of X	Simple Slope	Standard Error	t-value	Lower 95% CI	Upper 95% CI
-3.5	-0.240	0.261	-0.920	-0.753	0.273
-3.2	-0.183	0.237	-0.771	-0.650	0.284
-2.9	-0.126	0.214	-0.589	-0.547	0.295
-2.6	-0.069	0.191	-0.361	-0.444	0.306
-2.3	-0.012	0.168	-0.071	-0.342	0.318
-2	0.045	0.146	0.309	-0.241	0.331
-1.7	0.102	0.124	0.825	-0.141	0.345
-1.4	0.159	0.103	1.548	-0.043	0.361
-1.1	0.216	0.083	2.592	0.052	0.380
-0.8	0.273	0.067	4.071	0.141	0.405
-0.5	0.330	0.057	5.834	0.219	0.441
-0.2	0.387	0.055	7.001	0.278	0.496
0.1	0.444	0.064	6.965	0.319	0.569
0.4	0.501	0.079	6.350	0.346	0.656
0.7	0.558	0.098	5.714	0.366	0.750
1	0.615	0.118	5.198	0.382	0.848
1.3	0.672	0.140	4.798	0.397	0.947

Table SM4. Simple slopes across the range of observed values of ingroup affect (X) (-3.50, 1.50). 95% confidence intervals which *do not* include 0 indicate a significant simple slope, at that value of ingroup affect (Study 1B).

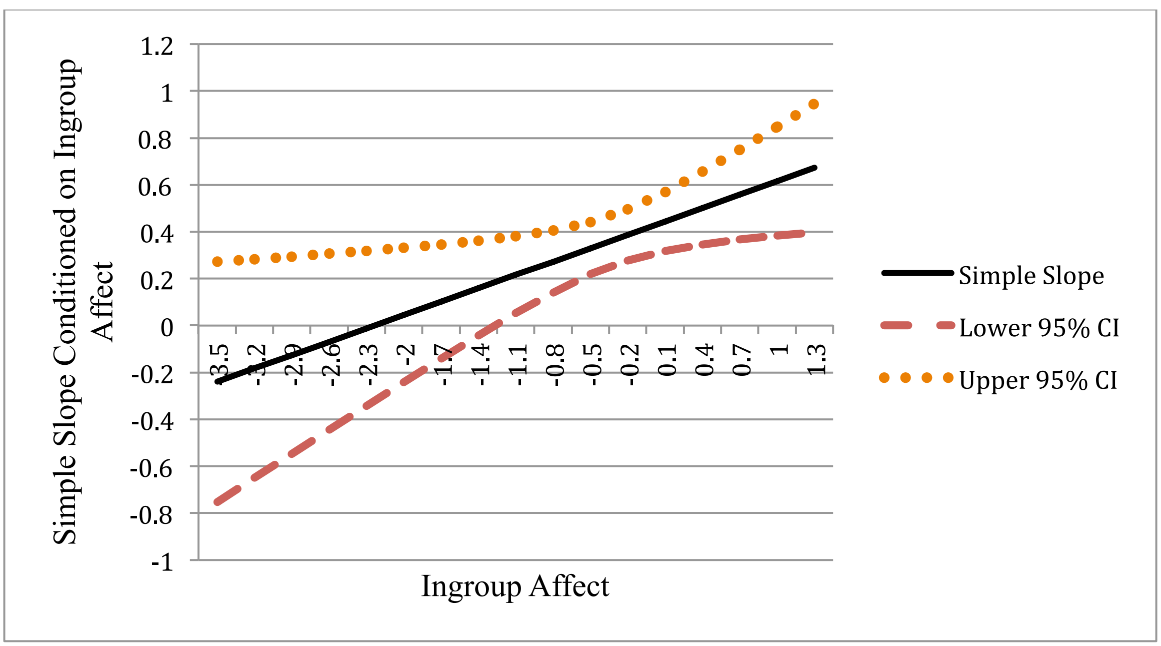


Figure SM4. Johnson-Neyman Plot for the Simple Slope of the Quadratic Relation Between Ingroup Affect and Identity Centrality (Study 1B).

Study 1C (Religious Identity – Canadian Undergraduate Sample)

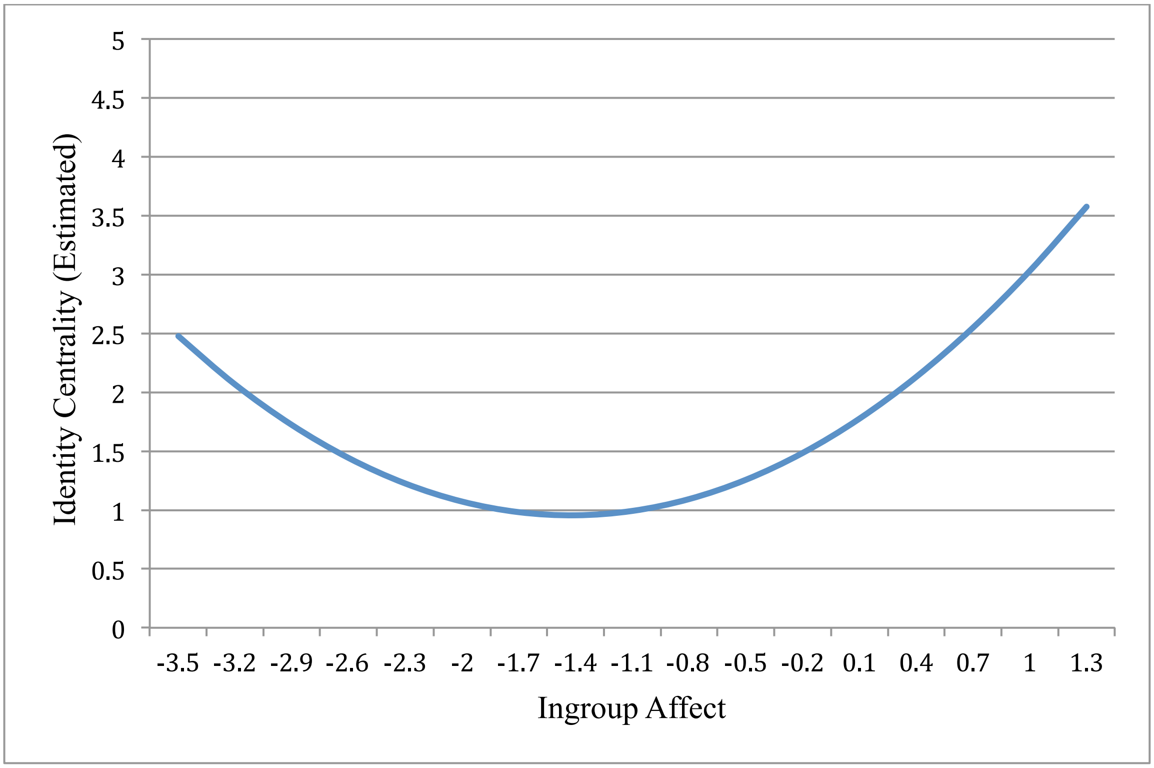


Figure SM5: Quadratic Relation Between Ingroup Affect and Identity Centrality. Approximated values of identity centrality are based on the regression coefficients for Study 1C:
$Y = (1.01)X + (.35)X^2 + 1.67$

Value of X	Simple Slope	Standard Error	t-value	Lower 95% CI	Upper 95% CI
-3.5	-1.465	0.560	-2.614	-2.567	-0.363
-3.2	-1.253	0.509	-2.462	-2.254	-0.253
-2.9	-1.041	0.458	-2.275	-1.941	-0.141
-2.6	-0.830	0.407	-2.038	-1.630	-0.029
-2.3	-0.618	0.357	-1.731	-1.319	0.084
-2	-0.406	0.308	-1.320	-1.011	0.199
-1.7	-0.194	0.260	-0.748	-0.705	0.316
-1.4	0.018	0.214	0.082	-0.403	0.439
-1.1	0.229	0.173	1.328	-0.110	0.569
-0.8	0.441	0.139	3.169	0.167	0.715
-0.5	0.653	0.120	5.421	0.416	0.890
-0.2	0.865	0.123	7.013	0.622	1.107
0.1	1.077	0.147	7.346	0.788	1.365
0.4	1.288	0.183	7.058	0.930	1.647
0.7	1.500	0.225	6.660	1.057	1.943
1	1.712	0.272	6.305	1.178	2.246
1.3	1.924	0.320	6.015	1.295	2.553

Table SM5. Simple slopes across the range of observed values of ingroup affect (X) (-3.42, 1.33). 95% confidence intervals which *do not* include 0 indicate a significant simple slope, at that value of ingroup affect (Study 1C).

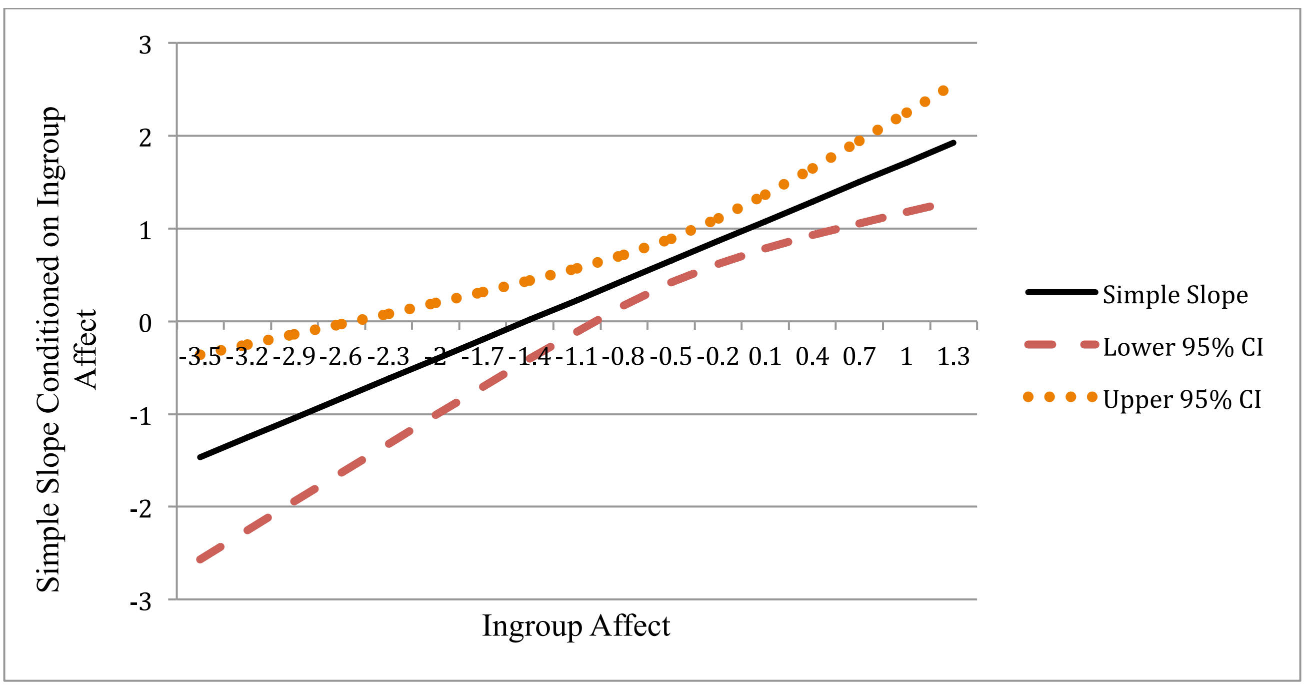


Figure SM6. Johnson-Neyman Plot for the Simple Slope of the Quadratic Relation Between Ingroup Affect and Identity Centrality (Study 1C).

Study 1D (Religious Identity – Canadian Community Sample)

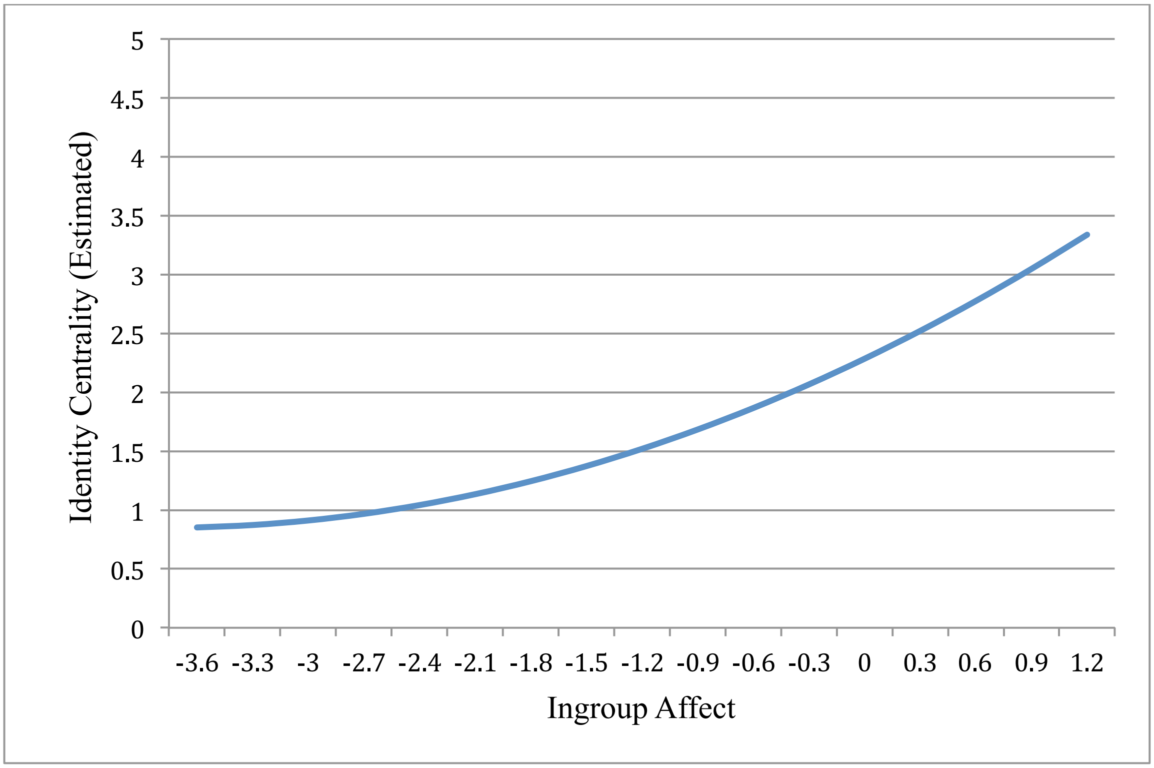


Figure SM7: Quadratic Relation Between Ingroup Affect and Identity Centrality. Approximated values of identity centrality are based on the regression coefficients for Study 1D:
$\mathbf{Y = (.76)X + (.10)X^2 + 2.29}$

Value of X	Simple Slope	Standard Error	t-value	Lower 95% CI	Upper 95% CI
-3.6	0.038	0.237	0.160	-0.429	0.505
-3.3	0.098	0.216	0.453	-0.328	0.524
-3	0.158	0.196	0.808	-0.227	0.543
-2.7	0.218	0.175	1.246	-0.126	0.562
-2.4	0.278	0.154	1.800	-0.026	0.582
-2.1	0.338	0.134	2.515	0.074	0.602
-1.8	0.398	0.115	3.465	0.172	0.624
-1.5	0.458	0.096	4.758	0.269	0.647
-1.2	0.518	0.079	6.544	0.362	0.674
-0.9	0.578	0.065	8.920	0.451	0.705
-0.6	0.638	0.055	11.522	0.529	0.747
-0.3	0.698	0.054	13.037	0.593	0.803
0	0.758	0.060	12.633	0.640	0.876
0.3	0.818	0.073	11.272	0.675	0.961
0.6	0.878	0.089	9.899	0.704	1.052
0.9	0.938	0.107	8.786	0.728	1.148
1.2	0.998	0.126	7.923	0.750	1.246

Table SM6. Simple slopes across the range of observed values of ingroup affect (X) (-3.57, 1.43). 95% confidence intervals which *do not* include 0 indicate a significant simple slope, at that value of ingroup affect (Study 1D).

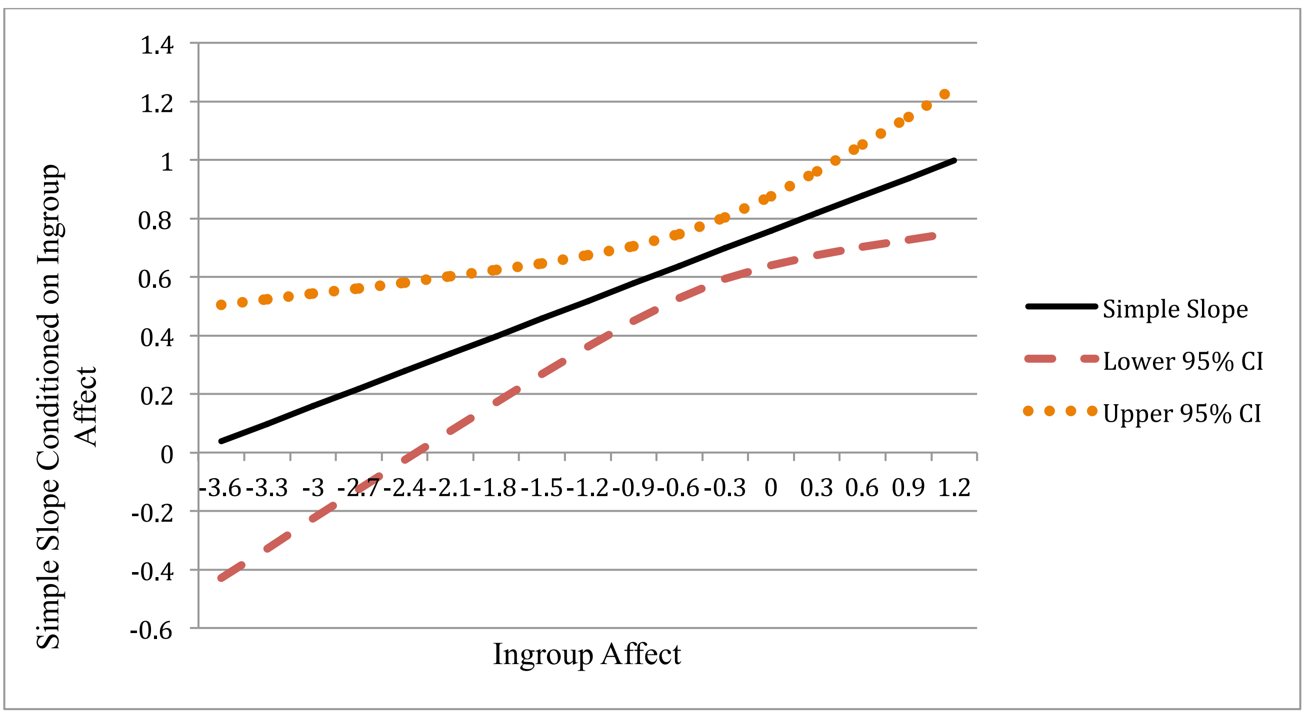


Figure SM8. Johnson-Neyman Plot for the Simple Slope of the Quadratic Relation Between Ingroup Affect and Identity Centrality (Study 1D).

Study 2A (Racial Identity –2006 South African Community Sample)

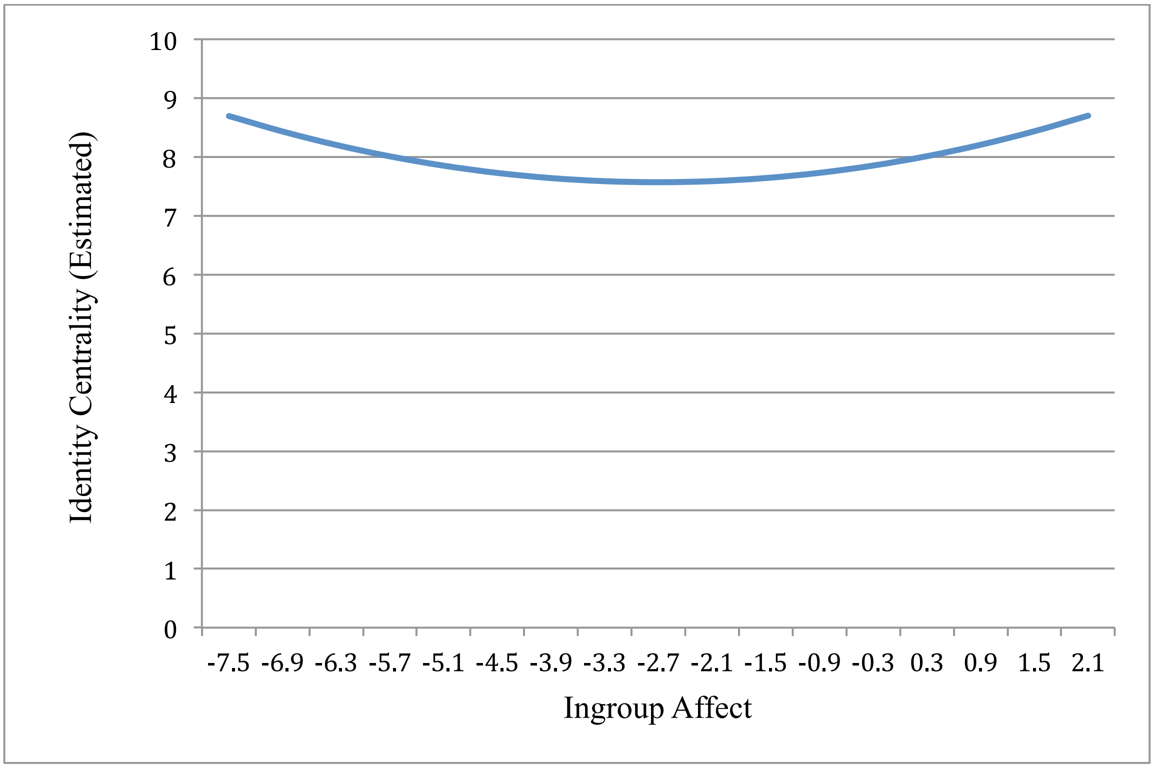


Figure SM9: Quadratic Relation Between Ingroup Affect and Identity Centrality. Approximated values of identity centrality are based on the regression coefficients for Study 2A:
$\mathbf{Y = (.27)X + (.05)X^2 + 7.93}$

Value of X	Simple Slope	Standard Error	t-value	Lower 95% CI	Upper 95% CI
-7.5	-0.470	0.064	-7.336	-0.596	-0.344
-6.9	-0.411	0.058	-7.061	-0.526	-0.297
-6.3	-0.352	0.052	-6.721	-0.455	-0.249
-5.7	-0.294	0.047	-6.288	-0.385	-0.202
-5.1	-0.235	0.041	-5.724	-0.315	-0.154
-4.5	-0.176	0.035	-4.964	-0.246	-0.106
-3.9	-0.117	0.030	-3.899	-0.176	-0.058
-3.3	-0.058	0.025	-2.341	-0.107	-0.009
-2.7	0.000	0.020	0.020	-0.040	0.040
-2.1	0.059	0.017	3.569	0.027	0.092
-1.5	0.118	0.014	8.149	0.090	0.146
-0.9	0.177	0.015	12.024	0.148	0.206
-0.3	0.236	0.017	13.723	0.202	0.269
0.3	0.294	0.021	13.952	0.253	0.336
0.9	0.353	0.026	13.668	0.302	0.404
1.5	0.412	0.031	13.281	0.351	0.473
2.1	0.471	0.036	12.915	0.399	0.542

Table SM7. Simple slopes across the range of observed values of ingroup affect (X) (-7.51, 2.49). 95% confidence intervals which *do not* include 0 indicate a significant simple slope, at that value of ingroup affect (Study 2A).

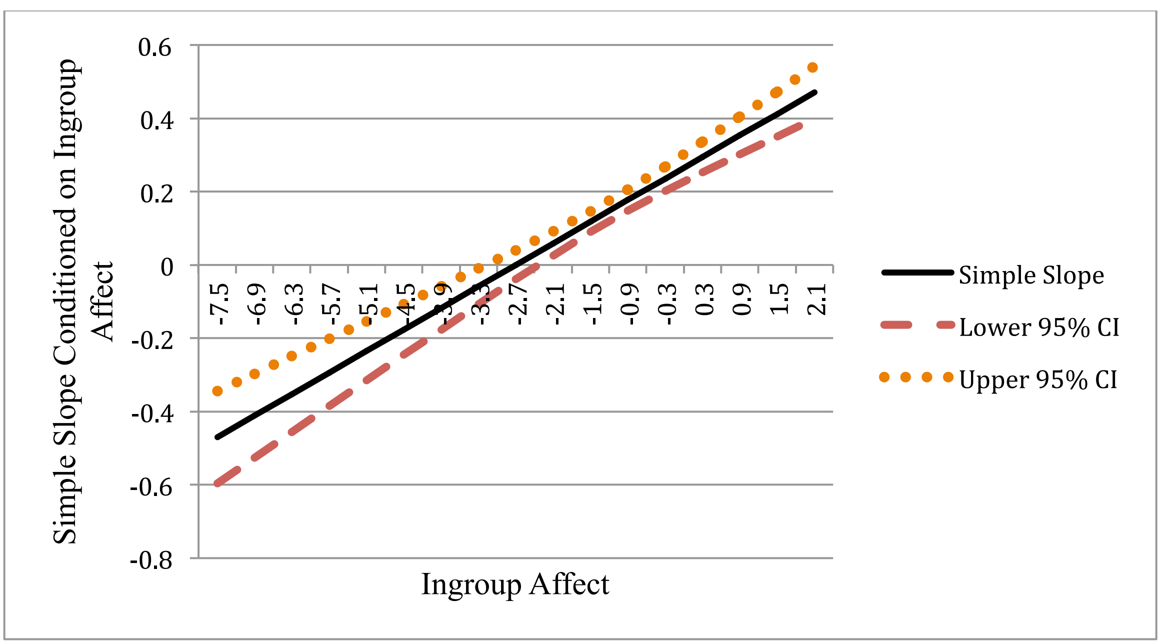


Figure SM10. Johnson-Neyman Plot for the Simple Slope of the Quadratic Relation Between Ingroup Affect and Identity Centrality (Study 2A).

Study 2B (Racial Identity – 2010 South African Community Sample)

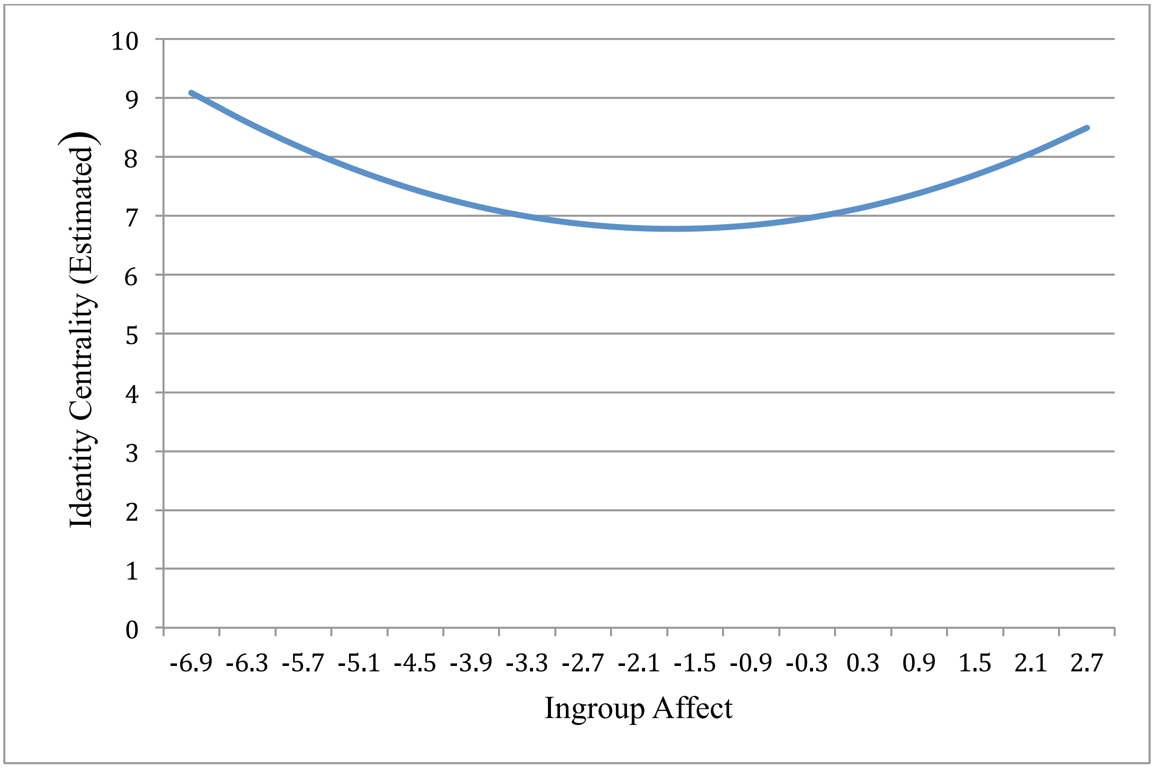


Figure SM11: Quadratic Relation Between Ingroup Affect and Identity Centrality. Approximated values of identity centrality are based on the regression coefficients for Study 2B: $\mathbf{Y = (.30)X + (.09)X^2 + 7.04}$

Value of X	Simple Slope	Standard Error	t-value	Lower 95% CI	Upper 95% CI
-6.9	-0.898	0.090	-10.022	-1.074	-0.722
-6.3	-0.793	0.081	-9.747	-0.953	-0.633
-5.7	-0.689	0.073	-9.406	-0.833	-0.545
-5.1	-0.584	0.065	-8.969	-0.712	-0.456
-4.5	-0.480	0.057	-8.396	-0.592	-0.368
-3.9	-0.376	0.049	-7.615	-0.473	-0.279
-3.3	-0.271	0.042	-6.505	-0.353	-0.189
-2.7	-0.167	0.034	-4.846	-0.234	-0.099
-2.1	-0.062	0.028	-2.245	-0.117	-0.008
-1.5	0.042	0.022	1.876	-0.002	0.086
-0.9	0.146	0.019	7.596	0.109	0.184
-0.3	0.251	0.020	12.823	0.212	0.289
0.3	0.355	0.023	15.360	0.310	0.401
0.9	0.460	0.029	15.972	0.403	0.516
1.5	0.564	0.036	15.873	0.494	0.634
2.1	0.668	0.043	15.590	0.584	0.753
2.7	0.773	0.051	15.289	0.673	0.872

Table SM8. Simple slopes across the range of observed values of ingroup affect (X) (-6.87, 3.13). 95% confidence intervals which *do not* include 0 indicate a significant simple slope, at that value of ingroup affect (Study 2B).

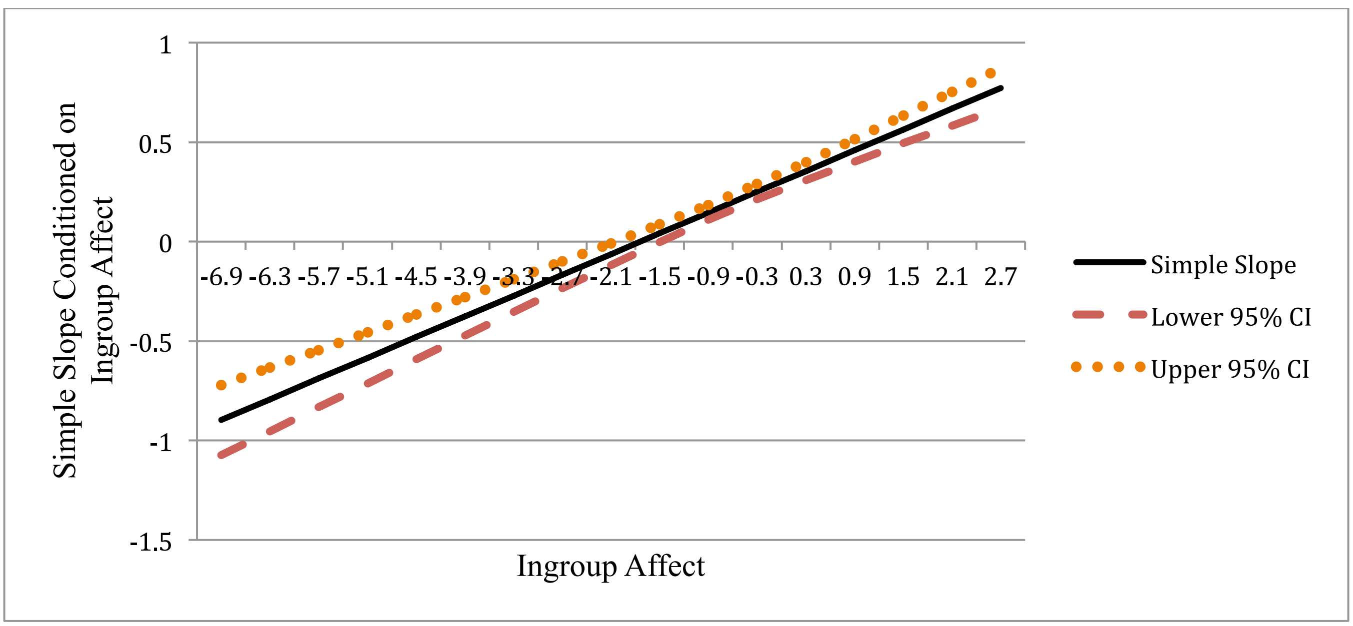


Figure SM11. Johnson-Neyman Plot for the Simple Slope of the Quadratic Relation Between Ingroup Affect and Identity Centrality (Study 2B).