# Supplementary Materials

## SM.1. Correlation Tables

**Table S1**

Correlation Table for all Variables at the Sample Level (Gender Group by Society; *N* = 28)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |  |  |
| 1. Personal Honor Endorsement | -0.00 | 0.42 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 2. Perceived Normative Honor Endorsement | 0.00 | 0.36 | .92\*\*\* |  |  |  |  |
|  |  |  | [.83, .96] |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 3. Self-Image Concerns (Difference Score) | 0.00 | 0.39 | .52\*\* | .46\* |  |  |  |
|  |  |  | [.18, .75] | [.10, .71] |  |  |  |
|  |  |  |  |  |  |  |  |
| 4. Social-Image Concerns (Difference Score) | -0.00 | 0.44 | .69\*\*\* | .76\*\*\* | .80\*\*\* |  |  |
|  |  |  | [.42, .84] | [.54, .88] | [.61, .91] |  |  |
|  |  |  |  |  |  |  |  |
| 5. Reluctance to Apologize | 0.00 | 0.19 | .27 | .22 | .68\*\*\* | .66\*\*\* |  |
|  |  |  | [-.11, .58] | [-.16, .55] | [.41, .84] | [.38, .83] |  |
|  |  |  |  |  |  |  |  |
| 6. Offered Apologies | -- | -- | -.10 | -.03 | -.31 | -.18 | -.29 |
|  |  |  | [-.46, .28] | [-.40, .34] | [-.61, .07] | [-.52, .21] | [-.60, .09] |
|  |  |  |  |  |  |  |  |

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates *p* < .05. \*\* indicates *p* < .01. \*\*\* indicates *p* < .001.

**Table S2**

Correlation Table for all Variables at the Individual Level (*N* = 5471)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  |  |  |  |  |  |  |  |  |  |
| 1. Personal Honor Endorsement: Defense of Family Reputation | -0.00 | 0.97 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 2. Personal Honor Endorsement: Self-Promotion & Retaliation | -0.00 | 0.82 | .50\*\*\* |  |  |  |  |  |  |
|  |  |  | [.48, .52] |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 3. Perceived Normative Honor Endorsement: Defense of Family Reputation | -0.00 | 0.92 | .61\*\*\* | .32\*\*\* |  |  |  |  |  |
|  |  |  | [.60, .63] | [.30, .34] |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 4. Perceived Normative Honor Endorsement: Self-Promotion & Retaliation | -0.00 | 0.86 | .34\*\*\* | .48\*\*\* | .63\*\*\* |  |  |  |  |
|  |  |  | [.31, .36] | [.46, .50] | [.61, .64] |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 5. Self-Image Concerns  (Difference Score) | 0.00 | 1.80 | -.22\*\*\* | .17\*\*\* | -.28\*\*\* | -.06\*\*\* |  |  |  |
|  |  |  | [-.25, -.20] | [.15, .20] | [-.31, -.26] | [-.09, -.04] |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 6. Social-Image Concerns  (Difference Score) | 0.00 | 1.67 | -.21\*\*\* | .15\*\*\* | -.27\*\*\* | -.03\*\* | .67\*\*\* |  |  |
|  |  |  | [-.24, -.19] | [.12, .18] | [-.29, -.24] | [-.06, -.01] | [.66, .69] |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 7. Reluctance to Apologize | 0.00 | 0.96 | -.19\*\*\* | .11\*\*\* | -.24\*\*\* | -.05\*\*\* | .47\*\*\* | .42\*\*\* |  |
|  |  |  | [-.21, -.16] | [.08, .14] | [-.27, -.22] | [-.07, -.02] | [.45, .49] | [.40, .44] |  |
|  |  |  |  |  |  |  |  |  |  |
| 8. Offered Apologies | -- | -- | -.02 | -.03\* | .02\*\* | -.01 | -.09\*\*\* | -.11\*\*\* | -.14\*\*\* |
|  |  |  | [-.01, .05] | [-.06, -.01] | [.00, .05] | [.03, .02] | [-.12, -.06] | [-.13, -.08] | [-.17, -.11] |
|  |  |  |  |  |  |  |  |  |  |

*Note.* *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). \* indicates *p* < .05. \*\* indicates *p* < .01. \*\*\* indicates *p* < .001.

## SM.2. Parameter Estimates for Mediation Analyses: Simultaneous Mediator Models

**Table S3**

Parameter Estimates for Two Mediator Models Involving Perceived Normative Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2) | .500 | .169 | .003\* | .168, .831 | .460 |  | .944 | .156 | < .001\* | .638, 1.251 | .762 |  | .500 | .169 | .003\* | .168, .831 | .460 |  | .944 | .156 | < .001\* | .638, 1.251 | .762 |
| Image Concerns 🡪 Outcome (b1/2) | .167 | .012 | < .001\* | .145, .190 | .402 |  | .101 | .012 | < .001\* | .077, .125 | .277 |  | -.049 | .028 | .076 | -.103, .005 | -.399 |  | -.115 | .027 | < .001\* | -.168, -.062 | -1.070 |
| Honor 🡪 Outcome (c'1) | -.063 | .069 | .363 | -.199, .073 | -.139 |  | - | - | - | - | - |  | .121 | .200 | .543 | -.270, .513 | .912 |  | - | - | - | - | - |
| Total effect (c1) | .116 | .096 | .224 | -.071, .303 | .257 |  | - | - | - | - | - |  | -.012 | .209 | .955 | -.421, .398 | -.087 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .084 | .028 | .003\* | .029, .138 | .185 |  | .096 | .020 | < .001\* | .056, .136 | .211 |  | -.024 | .014 | .086 | -.052, .004 | -.184 |  | -.109 | .027 | < .001\* | -.161, -.057 | -.815 |
| Correlation/Covariance Mediators | .076 | .024 | .002\* | .029, .123 | .787 |  | - | - | - | - | - |  | .076 | .024 | .002\* | .029, .123 | .787 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 21.2% |  |  |  |  |  | 58.1% |  |  |  |  |  | 21.2% |  |  |  |  |  | 58.1% |  |  |
| *R2* (Outcome) |  |  | 32.6% |  |  |  |  |  | - |  |  |  |  |  | 1.2% |  |  |  |  |  | - |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b3/4) | .167 | .012 | < .001\* | .145, .190 | .314 |  | .101 | .012 | < .001\* | .077, .125 | .176 |  | -.049 | .028 | .076 | -.103, .005 | -.336 |  | -.115 | .027 | < .001\* | -.168, -.062 | -.735 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a3/4) | .392 | .061 | < .001\* | .272, .511 | .188 |  | .424 | .048 | < .001\* | .329, .518 | .219 |  | .402 | .059 | < .001\* | .287, .516 | .194 |  | .432 | .050 | < .001\* | .333, .530 | .224 |
| Self-Promotion 🡪 Outcome (c’2) | .081 | .023 | < .001\* | .037, .126 | .073 |  | - | - | - | - | - |  | -.032 | .057 | .583 | -.144, .081 | -.105 |  | - | - | - | - | - |
| Total effect (c2) | .190 | .033 | < .001\* | .125, .254 | .171 |  | - | - | - | - | - |  | -.101 | .055 | .068 | -.209, .008 | -.335 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .065 | .010 | < .001\* | .045, .086 | .059 |  | .043 | .009 | < .001\* | .025, .061 | .039 |  | -.020 | .012 | .095 | -.043, .003 | -.065 |  | -.050 | .012 | < .001\* | -.074, -.025 | -.165 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a5/6) | -.785 | .059 | < .001\* | -.900, -.670 | -.401 |  | -.740 | .055 | < .001\* | -.848, -.632 | -.407 |  | -.796 | .057 | < .001\* | -.908, -.684 | -.405 |  | -.750 | .055 | < .001\* | -.858, -.643 | -.411 |
| Family Defense 🡪 Outcome (c’3) | -.159 | .025 | < .001\* | -.209, -.109 | -.153 |  | - | - | - | - | - |  | .008 | .062 | .894 | -.114, .081 | .029 |  | - | - | - | - | - |
| Total effect (c3) | -.365 | .032 | < .001\* | -.427, -.303 | -.351 |  | - | - | - | - | - |  | .134 | .059 | .024\* | .017, .250 | .467 |  | - | - | - | - | - |
| Indirect effect (a5/6 \* b3/4) | -.131 | .014 | < .001\* | -.159, -.103 | -.126 |  | -.075 | .013 | < .001\* | -.100, -.050 | -.072 |  | .039 | .022 | .083 | -.005, .083 | .136 |  | .086 | .020 | < .001\* | .047, .126 | .302 |
| Correlation/Covariance Mediators | 1.704 | .058 | < .001\* | 1.590, 1.818 | .634 |  | - | - | - | - | - |  | 1.689 | .055 | < .001\* | 1.582, 1.797 | .633 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 10.2% |  |  |  |  |  | 10.2% |  |  |  |  |  | 10.3% |  |  |  |  |  | 10.4% |  |  |
| *R2* (Outcome) |  |  | 25.6% |  |  |  |  |  | - |  |  |  |  |  | 2.0% |  |  |  |  |  | - |  |  |

*Note*. \* *p* < .05.

**Table S4**

Parameter Estimates for Two Mediator Models Involving Personal Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personal Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2) | .478 | .147 | .001\* | .189, .766 | .519 |  | .723 | .152 | < .001\* | .424, 1.022 | .689 |  | .478 | .147 | .001\* | .189, .766 | .519 |  | .723 | .152 | < .001\* | .424, 1.022 | .689 |
| Image Concerns 🡪 Outcome (b1/2) | .163 | .012 | < .001\* | .140, .186 | .386 |  | .102 | .013 | < .001\* | .076, .127 | .274 |  | -.045 | .029 | .120 | -.101, .012 | -.300 |  | -.113 | .027 | < .001\* | -.166, -.059 | -.860 |
| Honor 🡪 Outcome (c'1) | -.033 | .058 | .574 | -.146, .081 | -.084 |  | - | - | - | - | - |  | .026 | .132 | .846 | -.233, .284 | .186 |  | - | - | - | - | - |
| Total effect (c1) | .119 | .077 | .125 | -.033, .271 | .305 |  | - | - | - | - | - |  | -.077 | .143 | .587 | -.357, .202 | -.563 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .078 | .023 | .001\* | .032, .124 | .200 |  | .074 | .018 | < .001\* | .038, .109 | .189 |  | -.021 | .014 | .113 | -.048, .005 | -.156 |  | -.081 | .020 | < .001\* | -.122, -.041 | -.593 |
| Correlation/Covariance Mediators | .075 | .026 | .004\* | .024, .125 | .719 |  | - | - | - | - | - |  | .075 | .026 | .004\* | .024, .125 | .719 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 26.9% |  |  |  |  |  | 47.4% |  |  |  |  |  | 26.9% |  |  |  |  |  | 47.4% |  |  |
| *R2* (Outcome) |  |  | 33.5% |  |  |  |  |  | - |  |  |  |  |  | 1.8% |  |  |  |  |  | - |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b3/4) | .163 | .012 | < .001\* | .140, .186 | .306 |  | .102 | .013 | < .001\* | .076, .127 | .177 |  | -.045 | .029 | .120 | -.101, .012 | -.308 |  | -.113 | .027 | < .001\* | -.166, -.059 | -.718 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a3/4) | .832 | .052 | < .001\* | .696, .968 | .379 |  | .702 | .062 | < .001\* | .580, .823 | .344 |  | .843 | .074 | < .001\* | .697, .988 | .384 |  | .715 | .069 | < .001\* | .579, .850 | .351 |
| Self-Promotion 🡪 Outcome (c’2) | .112 | .020 | < .001\* | .072, .152 | .096 |  | - | - | - | - | - |  | -.049 | .059 | .405 | -.166, .067 | -.155 |  | - | - | - | - | - |
| Total effect (c2) | .319 | .034 | < .001\* | .253, .385 | .273 |  | - | - | - | - | - |  | -.168 | .054 | .002\* | -.274, -.062 | -.525 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .136 | .015 | < .001\* | .106, .165 | .116 |  | .071 | .013 | < .001\* | .046, .097 | .061 |  | -.038 | .025 | .135 | -.087, .012 | -.118 |  | -.081 | .018 | < .001\* | -.177, -.044 | -.252 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a5/6) | -.764 | .052 | < .001\* | -.866, -.662 | -.411 |  | -.666 | .047 | < .001\* | -.757, -.575 | -.386 |  | -.752 | .052 | < .001\* | -.853, -.651 | -.404 |  | -.661 | .048 | < .001\* | -.755, -.566 | -.382 |
| Family Defense 🡪 Outcome (c’3) | -.129 | .018 | < .001\* | -.164, -.093 | -.130 |  | - | - | - | - | - |  | .014 | .054 | .789 | -.091, .120 | .053 |  | - | - | - | - | - |
| Total effect (c3) | -.321 | .025 | < .001\* | -.370, .272 | -.324 |  | - | - | - | - | - |  | .123 | .051 | .016\* | .023, .223 | .451 |  | - | - | - | - | - |
| Indirect effect (a5/6 \* b3/4) | -.125 | .013 | < .001\* | -.150, -.100 | -.126 |  | -.068 | .011 | < .001\* | -.089, -.046 | -.068 |  | .034 | .022 | .124 | -.009, .077 | .124 |  | .074 | .018 | < .001\* | .039, .110 | .274 |
| Correlation/Covariance Mediators | 1.576 | .047 | < .001\* | 1.484, 1.668 | .616 |  | - | - | - | - | - |  | 1.570 | .047 | < .001\* | 1.478, 1.663 | .616 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 15.6% |  |  |  |  |  | 13.4% |  |  |  |  |  | 15.3% |  |  |  |  |  | 13.3% |  |  |
| *R2* (Outcome) |  |  | 25.4% |  |  |  |  |  | - |  |  |  |  |  | 2.0% |  |  |  |  |  | - |  |  |

*Note*. \* *p* < .05.

## SM.3. Parameter Estimates for Mediation Analyses: Single Mediator Models

**Table S5**

Parameter Estimates for Single Mediator Models Involving Perceived Normative Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived** **Normative Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1) | .500 | .169 | .003\* | .168, .831 | .460 |  | .944 | .156 | < .001\* | .638, 1.251 | .762 |  | .500 | .169 | .003\* | .168, .831 | .460 |  | .944 | .156 | < .001\* | .638, 1.251 | .762 |
| Image Concerns 🡪 Outcome (b1) | .227 | .011 | < .001\* | .205, .248 | .527 |  | .216 | .013 | < .001\* | .191, .240 | .605 |  | -.116 | .025 | < .001\* | -.165, -.067 | -1.126 |  | -.148 | .025 | < .001\* | -.198, -.099 | -1.542 |
| Honor 🡪 Outcome (c'1) | .003 | .072 | .968 | -.137, .143 | .006 |  | -.087 | .076 | .250 | -.237, .062 | -.198 |  | .061 | .203 | .763 | -.337, .460 | .549 |  | .133 | .202 | .511 | -.263, .528 | 1.112 |
| Total effect (c1) | .116 | .096 | .224 | -.071, .303 | .248 |  | .116 | .096 | .224 | -.071, .303 | .263 |  | .004 | .210 | .987 | -.408, .415 | .031 |  | -.008 | .209 | .971 | -.417, .402 | -.063 |
| Indirect effect (a1 \* b1) | .113 | .037 | .002\* | .040, .186 | .242 |  | 204 | .035 | < .001\* | .134, .273 | .461 |  | -.058 | .020 | .004 | -.097, -.019 | -.518 |  | -.140 | .027 | < .001\* | -.194, -.087 | -1.175 |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 21.2% |  |  |  |  |  | 22.2% |  |  |  |  |  | 21.2% |  |  |  |  |  | 58.1% |  |  |
| *R2* (Outcome) |  |  | 28.1% |  |  |  |  |  | 58.1% |  |  |  |  |  | 0.9% |  |  |  |  |  | 1.0% |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b2) | .227 | .011 | < .001\* | .205, .248 | .425 |  | .216 | .013 | < .001\* | .191, .240 | .375 |  | -.116 | .025 | < .001\* | -.165, -.067 | -.951 |  | -.148 | .025 | < .001\* | -.198, -.099 | -.977 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a2) | .392 | .061 | < .001\* | .272, .511 | .188 |  | .424 | .048 | < .001\* | .329, .518 | .219 |  | .402 | .059 | < .001\* | .287, .516 | .194 |  | .432 | .050 | < .001\* | .333, .530 | .224 |
| Self-Promotion 🡪 Outcome (c2) | .101 | .023 | < .001\* | .056, .146 | .091 |  | .098 | .025 | < .001\* | .048, .148 | .088 |  | -.055 | .056 | .326 | -.164, .054 | -.216 |  | -.037 | .057 | .523 | -.149, .076 | -.126 |
| Total effect (c2) | .190 | .033 | < .001\* | .125, .254 | .171 |  | .190 | .033 | < .001\* | .125, .254 | .171 |  | -.101 | .055 | .066 | -.209, .007 | -.400 |  | -.101 | .055 | .069 | -.209, .008 | -.345 |
| Indirect effect (a2 \* b2) | .089 | .015 | < .001\* | .059, .119 | .080 |  | .091 | .015 | < .001\* | .063, .120 | .082 |  | -.047 | .012 | < .001\* | -.071, -.022 | -.184 |  | -.064 | .014 | < .001\* | -.091, -.037 | -.219 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a3) | -.785 | .059 | < .001\* | -.900, -.670 | -.179 |  | -.740 | .055 | < .001\* | -.848, -.632 | -.407 |  | -.796 | .057 | < .001\* | -.908, -.684 | -.405 |  | -.750 | .055 | < .001\* | .858, -.643 | -.411 |
| Family Defense 🡪 Outcome (c3) | -.187 | .026 | < .001\* | -.238, -.137 | -.401 |  | -.206 | .024 | < .001\* | -.253, -.159 | -.197 |  | .041 | .061 | .504 | -.078, .160 | .169 |  | .023 | .061 | .710 | -.097, .142 | .082 |
| Total effect (c3) | -.365 | .032 | < .001\* | -.427, -.303 | -.350 |  | -.365 | .032 | < .001\* | -.427, -.303 | -.350 |  | .133 | .059 | .024\* | .017, .249 | .554 |  | .134 | .059 | .024\* | .018, .250 | .484 |
| Indirect effect (a3 \* b2) | -.178 | .019 | < .001\* | -.215, -.141 | -.170 |  | -.159 | .020 | < .001\* | -.198, -.121 | -.153 |  | .092 | .021 | < .001\* | .050, .134 | .385 |  | .111 | .021 | < .001\* | .071, .152 | .402 |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 10.2% |  |  |  |  |  | 10.2% |  |  |  |  |  | 10.3% |  |  |  |  |  | 10.4% |  |  |
| *R2* (Outcome) |  |  | 23.9% |  |  |  |  |  | 20.3% |  |  |  |  |  | 1.4% |  |  |  |  |  | 1.9% |  |  |

*Note*. \* *p* < .05.

**Table S6**

Parameter Estimates for Single Mediator Models Involving Personal Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personal Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1) | .478 | .147 | .001\* | .189, .766 | .519 |  | .723 | .152 | < .001\* | .424, 1.022 | .689 |  | .478 | .147 | .001\* | .189, .766 | .519 |  | .723 | .152 | < .001\* | .424, 1.022 | .689 |
| Image Concerns 🡪 Outcome (b1) | .222 | .012 | < .001\* | .199, .245 | .514 |  | .209 | .013 | < .001\* | .183, .235 | .559 |  | -.110 | .027 | < .001\* | -.162, -.057 | -.831 |  | -.142 | .026 | < .001\* | -.194, -.090 | -1.119 |
| Honor 🡪 Outcome (c'1) | .013 | .061 | .833 | -.107, .133 | .032 |  | -.032 | .062 | < .001\* | .154, .090 | -.081 |  | -.033 | .136 | .808 | -.300, .234 | -.272 |  | .025 | .133 | .852 | -.235, .285 | .186 |
| Total effect (c1) | .119 | .077 | .125 | -.033, .271 | .299 |  | .119 | .077 | .125 | -.033, .271 | .304 |  | -.052 | .016 | .001\* | -.366, .195 | -.703 |  | -.078 | .142 | .585 | -.145, -.060 | -.585 |
| Indirect effect (a1 \* b1) | .106 | .031 | .001\* | .045, .167 | .267 |  | .151 | .032 | < .001\* | .088, .214 | .385 |  | -.085 | .143 | .551 | -.084, -.020 | -.431 |  | -.103 | .022 | < .001\* | -.357, .201 | -.771 |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 26.9% |  |  |  |  |  | 47.4% |  |  |  |  |  | 26.9% |  |  |  |  |  | 47.4% |  |  |
| *R2* (Outcome) |  |  | 28.3% |  |  |  |  |  | 25.6% |  |  |  |  |  | 1.4% |  |  |  |  |  | 1.6% |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b2) | .222 | .012 | < .001\* | .199, .245 | .417 |  | .209 | .013 | < .001\* | .183, .235 | .364 |  | -.110 | .027 | < .001\* | -.162, -.057 | -.890 |  | -.142 | .026 | < .001\* | -.194, -.090 | -.928 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a2) | .832 | .069 | < .001\* | .696, .968 | .379 |  | .702 | .062 | < .001\* | .580, .823 | .344 |  | .843 | .074 | < .001\* | .697, .988 | .384 |  | .715 | .069 | < .001\* | .579, .850 | .351 |
| Self-Promotion 🡪 Outcome (c2) | .134 | .022 | < .001\* | .090, .178 | .115 |  | .173 | .021 | < .001\* | .131, .215 | .148 |  | -.074 | .057 | .195 | -.187, .038 | -.275 |  | -.066 | .057 | .242 | -.178, .045 | -.213 |
| Total effect (c2) | .319 | .034 | < .001\* | .253, .385 | .273 |  | .319 | .034 | < .001\* | .253, .385 | .273 |  | -.167 | .054 | .002\* | -.273, -.061 | -.617 |  | -.168 | .054 | .002\* | -.274, -.062 | -.539 |
| Indirect effect (a2 \* b2) | .185 | .021 | < .001\* | .144, .225 | .158 |  | .147 | .020 | < .001\* | .108, .185 | .125 |  | -.092 | .025 | < .001\* | -.141, -.044 | -.342 |  | -.102 | .021 | < .001\* | -.142, -.061 | -.326 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a3) | -.764 | .052 | < .001\* | -.866, -.662 | -.411 |  | -.666 | .047 | < .001\* | -.757, -.575 | -.386 |  | -.752 | .052 | < .001\* | -.853, -.651 | -.404 |  | -.661 | .048 | < .001\* | -.755, -.566 | -.382 |
| Family Defense 🡪 Outcome (c3) | -.151 | .019 | < .001\* | -.189, -.114 | -.153 |  | -.182 | .017 | < .001\* | -.216, -.148 | -.184 |  | .039 | .053 | .459 | -.065, .144 | .172 |  | .029 | .051 | .565 | -.071, .130 | .111 |
| Total effect (c3) | -.321 | .025 | < .001\* | -.370, -.272 | .324 |  | -.321 | .025 | < .001\* | -.370, -.272 | -.324 |  | .122 | .051 | .017\* | .022, .221 | .532 |  | .123 | .051 | .016 | .023, .223 | .465 |
| Indirect effect (a3 \* b2) | -.170 | .017 | < .001\* | -.202, -.137 | -.171 |  | -.139 | .016 | < .001\* | -.170, -.108 | -.140 |  | .082 | .021 | < .001\* | .041, .124 | .360 |  | .094 | .019 | < .001\* | .056, .131 | .354 |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 15.6% |  |  |  |  |  | 13.4% |  |  |  |  |  | 15.3% |  |  |  |  |  | 13.3% |  |  |
| *R2* (Outcome) |  |  | 23.7% |  |  |  |  |  | 20.5% |  |  |  |  |  | 1.5% |  |  |  |  |  | 1.9% |  |  |

*Note*. \* *p* < .05.

## SM.4. Measurement Models

Here we report the measurement models at the individual and culture level for the scales to be used in our mediation analyses (self-image concerns, social-image concerns, and reluctance to apologize). Equivalent measurement models for the honor value scales are reported elsewhere (Vignoles et al., 2024). We separately conducted parallel series of measurement models for each scale, accounting for the multi-level structure of the data (nesting participants within cultural groups defined by the intersection of country and gender) and for differences in acquiescent response style.

In a first step, we conducted an ***exploratory factor analysis (EFA)*** to determine the most meaningful structure in these items at the individual level of analysis, using the TYPE=COMPLEX function in MPLUS to account for clustering of individuals into 28 cultural groups.

In a second step, we then conducted a ***confirmatory factor analysis (CFA)*** to model the best-fitting structure identified in the EFA, again using the TYPE=COMPLEX function to account for clustering. However, we included an additional method factor to model participants’ acquiescent response tendencies: this method factor consisted of a latent factor with loadings of all items on this factor as set to 1, and itself uncorrelated with all substantive factors (see Welkenhuysen-Gybels et al., 2003). Depending on the fit of the model, we then screened for any necessary changes in the item structure (i.e., based on suggested modification indices and/or low item loadings, combined with theoretical considerations on the meaning of the items).

In a third step, we then tested the within-group CFA structure for metric invariance across cultural regions and genders, using ***multigroup invariance testing***. We grouped our 28 cultural groups into 5 cultural regions that have previously been distinguished by previous research based on socio-demographic, religious, linguistic, and historical dimensions: Anglo-West (UK, US, Canada), Latin Europe (Spain, Italy), Southeastern Europe (Greece, Greek Cypriot Community), MENA (Türkiye, Lebanon, Egypt, Turkish Cypriot Community, Tunisia), and East Asia (Japan, South Korea) (Mensah & Chen, 2012). We then tested invariance between these regions by running a series of multigroup models of the CFA structure as two-level models with an empty between-groups level (i.e., the model structure was modelled at the within-groups level only using group-mean-centered items). In line with previous testing approaches, we compared a ***constrained model***, in which the loadings of all items are constrained to be equal across all region or gender groups, against an ***unconstrained model*** in which item loadings were allowed to vary across all region or gender groups. We adopted the conventional rule to assume invariance if the difference in CFI was equal or less than .01 when comparing constrained and unconstrained models (Cheung & Rensvold, 2002). Where this criterion was not met, we considered items as potentially non-invariant and eligible for exclusion if the item showed both (a) a modification index > 10 in the constrained model that suggested freeing up the loading constraint across groups (thus implying that the size of the loading differed significantly across groups) and (b) one or more non-significant loadings in the unconstrained model (suggesting the item may not be a valid indicator of its target factor in one or more groups).

In a fourth step, we tested whether the identified within-groups structure would hold at the between-group level of analysis (*N* = 28 cultural groups), using a ***multilevel confirmatory factor analysis*** to model factors at the within- and between-groups levels separately. We started with a constrained model setting the factor structure to be equal at both the individual and group levels of analysis, thus following a between-group level factor structure that was the same as the existing within-groups model. We then explored various unconstrained models in which the factor structure at the between-group level were allowed to differ from the established structure and loadings at the within-group level. We then refined the model at the between-groups level based on (a) how well the between-groups model fit the data overall, and (b) the strength of individual item loadings (i.e., removing non-significant items from the sample-level structure) until a final model was reached that was theoretically meaningful and fit the data well.

In a fifth and final step, we then also tested the possibility of isomorphism across levels for any models that showed the same factor structure for individual and group levels. To this end, we tested an unconstrained model (reflecting the final multilevel model structure from the previous step) with a constrained model in which we constrained the loadings of all items to b ethe same across both levels of analyses.

Analyses were conducted using Mplus Version 8.5 (Muthén & Muthén, 1998). We evaluated model fit using the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Squared Residual (SRMR). Values of CFI and TLI > .95 (or > .90) RMSEA < .06 (or < .08), and SRMR < .08 (or < .10) have been proposed as criteria for “good” (or “acceptable”) fit (Hu & Bentler, 1999; Kline, 2023). Note that all these cut-off values should be considered as “rules of thumb” to aid interpretation and not used to draw firm inferences. They are mostly based on simpler statistical models tested in single groups only, and so they may be excessively stringent for more complex scenarios such as our current goal of evaluating a multi-factor instrument across 28 culturally diverse groups (Marsh et al., 2004). For multilevel models, Mplus provides separate values of SRMR for the within-groups and between-groups parts of the model: SRMRwithin and SRMRbetween. However, it is known that SRMR becomes inflated and is arguably of limited use with sample sizes below 200 (Asparouhov & Muthén, 2018). With 28 units of analysis at the between-groups level of our multilevel models, we therefore considered that values of SRMRbetween < .20 should be considered acceptable, provided that other fit indices did not suggest otherwise.

### SM.4.1. Reluctance to Apologize

We first conducted an **exploratory factor analysis** to identify the underlying structure for these items at the individual level. Items were uncentered and clustered by the 28 samples made up by the combination of gender (male vs female) and country. A one-factor solution appeared to be the most theoretically meaningful and parsimonious solution. A two-factor or three-factort solution did not converge. Fit of the final one-factor solution was not considered adequate (χ2[2] = 230.593, CFI = .351, TLI = .000, SRMR = .111, RMSEA = .145); however given that a following CFA including a method factor improved the fit of the one-factor solution we interpreted this as being due to the missing control for response tendencies in the EFA, not due to the conceptual structure of the model.

Table S7

Exploratory Factor Analysis Loadings of Reluctance to Apologize Items

|  |  |
| --- | --- |
| **Item** | **Reluctance to  Apologize** |
| I am unlikely to apologize if I have done something wrong. | .287 |
| I rarely apologise to other people. | .243 |
| In general, I apologise after having done something wrong. | -.749 |
| After I have done something wrong, I usually apologize. | -.758 |
| *Note.* Shown are the standardized loadings for the final one-factor solution of the exploratory factor analysis conducted with the reluctance to apologize items. | |

In the second step, we conducted a **confirmatory factor analysis** with the one-factor structure as well as a method factor to assess acquiescence in responding (see Table S8 for primary loadings on substantive factors). Fit of the model was excellent (χ2[1] = 1.266, CFI = .999, TLI = .995, SRMR = .002, RMSEA = .007), and loadings for all items were significant. No modification indices emerged.

**Table S8**

Confirmatory Factor Analysis Loadings of Reluctance to Apologize Items

|  |  |
| --- | --- |
| **Item** | **Reluctance to  Apologize** |
| I am unlikely to apologize if I have done something wrong. | .607 |
| I rarely apologise to other people. | .536 |
| In general, I apologise after having done something wrong. | -.605 |
| After I have done something wrong, I usually apologize. | -.607 |
| *Note.* Shown are the standardized loadings for the final one-factor solution of the confirmatory factor analysis conducted with the reluctance to apologize items. | |

In the third step, we conducted **multigroup invariance testing** with the established one-factor structure. We tested invariance both across cultural regions, and across genders (female and male). An unconstrained model fit better than a constrained model across cultural regions (Constrained: χ2[37] = 80.154, CFI = .975, TLI = .980, SRMR = .015, RMSEA = .034; Unconstrained: χ2[24] = 21.366, CFI = 1.000, TLI = 1.000, SRMR = .003, RMSEA = .000; ΔCFI = .025), but not across gender groups (Constrained: χ2[13] = 2.208, CFI = 1.000, TLI = 1.000, SRMR = .002, RMSEA = .000; Unconstrained: χ2[10] = 3.096, CFI = 1.000, TLI = 1.000, SRMR = .001, RMSEA = .000; ΔCFI = .000). We thus assumed invariance of our items across genders, but we followed up our invariance analysis on an item-by-item basis across regions, in which all of the 4 items met our criteria for invariance across regions (no combination of modification index in the constrained model and non-significant loading in the unconstrained model). We there did not exclude any items in this step.

In the fourth step, we conducted a **multilevel confirmatory factor** analysis to model the factor structure of our data at the between-samples level. We found that a one-factor model on the between-samples level (see Table S9) was the most theoretically meaningful, interpretable, and fit the data well (χ2[2] = 0.994, CFI = 1.000, TLI = 1.000, RMSEA = .000, SRMRWithin = .002, SRMRBetween = .023). No modification indices emerged in the final model, and a model with two-factors are the between-sample level did not converge.

**Table S9**

Multilevel Confirmatory Factor Analysis Loadings of Reluctance to Apologize Items

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Individual-Level** |  | **Culture-Level** | |
| **Item** | **Reluctance to  Apologize** |  | **Reluctance to  Apologize** | |
| I am unlikely to apologize if I have done something wrong. | .609 |  | .679 | |
| I rarely apologise to other people. | .529 |  | .683 | |
| In general, I apologise after having done something wrong. | -.594 |  | -.902 | |
| After I have done something wrong, I usually apologize. | -.611 |  | -.551 | |
| *Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis conducted with the reluctance to apologize items (one factor at the individual-level, and one factor at the culture-level). | | | |  |

In a fifth and final step, we then tested the possibility of **isomorphism** across levels for the final model. A constrained model with equal loadings of all items across both levels fit the data as well as an unconstrained model (Constrained: χ2[5] = 9.060, CFI = .995, TLI = .987, SRMRWithin = .012, SRMRBetween = .148, RMSEA = .034; Unconstrained: χ2[2] = 0.994, CFI = 1.000, TLI = 1.000, RMSEA = .000, SRMRWithin = .002, SRMRBetween = .239, ΔCFI = .005). We therefore decided to continue with the isomorphism model as a final model (see Table S10 for final loadings). All factors showed significant variances in the final model.

**Table S10**

Multilevel Confirmatory Factor Isomorphism Analysis Loadings of Reluctance to Apologize Items

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Individual-Level** |  | **Culture-Level** | |
| **Item** | **Reluctance to  Apologize** |  | **Reluctance to  Apologize** | |
| I am unlikely to apologize if I have done something wrong. | .608 |  | .813 | |
| I rarely apologise to other people. | .531 |  | .365 | |
| In general, I apologise after having done something wrong. | -.596 |  | -.718 | |
| After I have done something wrong, I usually apologize. | -.609 |  | -.669 | |
| *Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis for isomorphism (constraining loading strength to be equal across both levels) conducted with the reluctance to apologize items (one factor at the individual-level, and one factor at the culture-level). Please note that, despite the isomorphism constraints, the standardized estimates differ between levels due because the respective standardization of the (identical) unstandardized estimates is done using separate measures of standard deviations at the two levels. | | | |  |

### SM.4.2. Self-Image Concerns

We first conducted an **exploratory factor analysis** to identify the underlying structure for these items at the individual level. Items were uncentered and clustered by the 28 samples made up by the combination of gender (male vs female) and country. A two-factor solution appeared to be the most theoretically meaningful and parsimonious solution. A one-factor solution fit the data substantially less (χ2[27] = 2827.12, CFI = .845, TLI = .793, SRMR = .125, RMSEA = .138), while a three-factor solution contained a single-item factor. Fit of the final two-factor solution was excellent (χ2[19] = 47.192, CFI = .998, TLI = .997, SRMR = .006, RMSEA = .016). As shown in Table S11, primary loadings of items were high (all above 0.6) and significant, with cross-loadings being below 0.1 for all items. Based on the pattern of item loadings, we interpreted the first factor as measuring self-image concerns about apologizing and the second factor as measuring self-image concerns about not apologizing.

Table S11

Exploratory Factor Analysis Loadings of Self-Image Concerns Items

|  |  |  |
| --- | --- | --- |
| **Item** | **Self-Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .764 | -.010 |
| If I apologised for something I have done wrong, I would lose respect for myself. | .782 | .002 |
| I would see myself as weak after apologising for a wrongdoing. | .857 | -.014 |
| Apologizing to another person would make me feel inferior to that person. | .852 | .007 |
| I would see myself as incompetent if I apologized. | .856 | -.002 |
| Apologizing after I have done something wrong would make me feel powerless. | .832 | .022 |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. | .004 | .754 |
| Failing to apologise for a wrongdoing would harm my view of myself. | .005 | .765 |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. | -.082 | .679 |
| *Note.* Shown are the standardized loadings for the final two-factor solution of the exploratory factor analysis conducted with the self-image concerns items. | | |

In the second step, we conducted a **confirmatory factor analysis** with the two-factor structure as well as a method factor to assess acquiescence in responding (see Table S12 for primary loadings on substantive factors). Fit of the model was excellent (χ2[67] =753.262, CFI = .959, TLI = .952, SRMR = .071, RMSEA = .043), and loadings for all items were significant. Modification indices suggested one possible cross-loadings of items related to the substantive factors (χ2 change = 27.505), but as this was low in strength (-0.085) compared to the respective primary loading (0.645) and given that the model already showed uniformly good fit indices we decided to not add any cross-loadings to the model in this step.

**Table S12**

Confirmatory Factor Analysis Loadings of Self-Image Concerns Items

|  |  |  |
| --- | --- | --- |
| **Item** | **Self-Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .709 |  |
| If I apologised for something I have done wrong, I would lose respect for myself. | .730 |  |
| I would see myself as weak after apologising for a wrongdoing. | .799 |  |
| Apologizing to another person would make me feel inferior to that person. | .799 |  |
| I would see myself as incompetent if I apologized. | .802 |  |
| Apologizing after I have done something wrong would make me feel powerless. | .779 |  |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. |  | .728 |
| Failing to apologise for a wrongdoing would harm my view of myself. |  | .738 |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. |  | .645 |
| *Note.* Shown are the standardized loadings for the final two-factor solution of the confirmatory factor analysis conducted with the self-image concerns items. | | |

In the third step, we conducted **multigroup invariance testing** with the established two-factor structure. We tested invariance both across cultural regions, and across genders (female and male). A constrained model fit as well as an unconstrained model across cultural regions (Constrained: χ2[428] = 1924.508, CFI = .932, TLI = .938, SRMR = .048, RMSEA = .057; Unconstrained: χ2[400] = 1884.327, CFI = 0.932, TLI = 0.934, SRMR = .048, RMSEA = .058; ΔCFI = .000), and gender groups (Constrained: χ2[167] = 1150.907, CFI = .925, TLI = .930, SRMR = .046, RMSEA = .046; Unconstrained: χ2[160] = 1149.126, CFI = .925, TLI = .927, SRMR = .046, RMSEA = .048; ΔCFI = .000). We thus assumed invariance of our items across genders and regions.

In the fourth step, we conducted a **multilevel confirmatory factor** analysis to model the factor structure of our data at the between-samples level. We found that a two-factor model on the between-samples level (see Table S13 ) was the most theoretically meaningful, interpretable, and fit the data well (χ2[135] = 1395.932, CFI = 0.937, TLI = 0.927, RMSEA = 0.041, SRMRWithin = .066, SRMRBetween = .239). Modification indices suggested one possible cross-loadings of items related to the substantive factors (χ2 change = 34.879), but as this was low in strength (-0.075) compared to the respective primary loading (0.760) and given that the model already showed uniformly good fit indices we decided to not add any cross-loadings to the model in this step.

**Table S13**

Multilevel Confirmatory Factor Analysis Loadings of Self-Image Concerns Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Individual-Level** | | |  | **Culture-Level** | | |
| **Item** | **Self-Image Concerns about apologizing** |  | **Self-Image Concerns about not apologizing** |  | **Self-Image Concerns about apologizing** |  | **Self-Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .698 |  |  |  | .882 |  |  |
| If I apologised for something I have done wrong, I would lose respect for myself. | .715 |  |  |  | .940 |  |  |
| I would see myself as weak after apologising for a wrongdoing. | .789 |  |  |  | .944 |  |  |
| Apologizing to another person would make me feel inferior to that person. | .791 |  |  |  | .924 |  |  |
| I would see myself as incompetent if I apologized. | .796 |  |  |  | .922 |  |  |
| Apologizing after I have done something wrong would make me feel powerless. | .768 |  |  |  | .927 |  |  |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. |  |  | .710 |  |  |  | .939 |
| Failing to apologise for a wrongdoing would harm my view of myself. |  |  | .711 |  |  |  | .973 |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. |  |  | .639 |  |  |  | .760 |
| *Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis conducted with the self-image concerns items (two factors at the individual-level, and two factors at the culture-level). | | | | | | | |

In a fifth and final step, we then tested the possibility of **isomorphism** across levels for the final model. A constrained model in which we constrained the loadings of all items to be the same across both levels of analyses fit the data as well as an unconstrained model (Constrained: χ2[142] = 1407.563, CFI = .936, TLI = .930, SRMRWithin = .066, SRMRBetween = .260, RMSEA = .040; Unconstrained: χ2[135] = 1395.932, CFI = 0.937, TLI = 0.927, RMSEA = 0.041, SRMRWithin = .066, SRMRBetween = .239, ΔCFI = .001). We therefore decided to continue with and calculate our factor scores for reluctance to apologize based on the isomorphism model (see Table S14 for final loadings). All factors showed significant variances in the final model.

**Table S14**

Multilevel Confirmatory Factor Isomorphism Analysis Loadings of Self-Image Concern Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Individual-Level** | | |  | **Culture-Level** | | |
| **Item** | **Self-Image Concerns about apologizing** |  | **Self-Image Concerns about not apologizing** |  | **Self-Image Concerns about apologizing** |  | **Self-Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | 0.698 |  |  |  | 0.868 |  |  |
| If I apologised for something I have done wrong, I would lose respect for myself. | 0.717 |  |  |  | 0.909 |  |  |
| I would see myself as weak after apologising for a wrongdoing. | 0.790 |  |  |  | 0.932 |  |  |
| Apologizing to another person would make me feel inferior to that person. | 0.791 |  |  |  | 0.925 |  |  |
| I would see myself as incompetent if I apologized. | 0.795 |  |  |  | 0.924 |  |  |
| Apologizing after I have done something wrong would make me feel powerless. | 0.769 |  |  |  | 0.917 |  |  |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. |  |  | 0.710 |  |  |  | 0.935 |
| Failing to apologise for a wrongdoing would harm my view of myself. |  |  | 0.712 |  |  |  | 0.969 |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. |  |  | 0.638 |  |  |  | 0.799 |
| *Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis for isomorphism (constraining loading strength to be equal across both levels) conducted with the self-image concerns items (two factors at the individual-level, and two factors at the culture-level). Please note that, despite the isomorphism constraints, the standardized estimates differ between levels due because the respective standardization of the (identical) unstandardized estimates is done using separate measures of standard deviations at the two levels. | | | | | | | |

### SM.4.3. Social-Image Concerns

We first conducted an **exploratory factor analysis** to identify the underlying structure for these items at the individual level. Items were uncentered and clustered by the 28 samples made up by the combination of gender (male vs female) and country. A two-factor solution appeared to be the most theoretically meaningful and parsimonious solution. A one-factor solution fit the data substantially less (χ2[27] = 3424.432, CFI = .880, TLI = .840, SRMR = .120, RMSEA = .152), while a three-factor solution contained a single-item factor. Fit of the final two-factor solution was excellent (χ2[19] = 37.968, CFI = .999, TLI = .999, SRMR = .006, RMSEA = .014). As shown in Table S15, primary loadings of items were high (all above 0.6) and significant, with cross-loadings being below 0.1 for all items. Based on the pattern of item loadings, we interpreted the first factor as measuring social-image concerns about apologizing and the second factor as measuring social-image concerns about not apologizing.

Table S15

Exploratory Factor Analysis Loadings of Social-Image Concerns Items

|  |  |  |
| --- | --- | --- |
| **Item** | **Social Image Concerns about apologizing** | **Social Image Concerns about not apologizing** |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. | .782 | .007 |
| If I apologised for something I’ve done wrong, I would lose respect from other people. | .749 | .025 |
| I would look weak to other people if I apologised for a wrongdoing. | .857 | -.004 |
| Apologizing to another person would make that person see me as inferior to them. | .819 | .011 |
| Others would see me as incompetent if I apologised. | .844 | -.012 |
| Apologizing after I have done something wrong would make me look powerless to others. | .849 | -.012 |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. | .001 | .763 |
| Failing to apologise for a wrongdoing would harm my reputation. | .012 | .738 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. | -.048 | .683 |
| *Note.* Shown are the standardized loadings for the final two-factor solution of the exploratory factor analysis conducted with the social-image concerns items. | | |

In the second step, we conducted a **confirmatory factor analysis** with the two-factor structure as well as a method factor to assess acquiescence in responding (see Table S12 for primary loadings on substantive factors). Fit of the model was excellent (χ2[67] = 783.047, CFI = .962, TLI = .956, SRMR = .072, RMSEA = .044), and loadings for all items were significant. Modification indices suggested one possible cross-loadings of items related to the substantive factors (χ2 change = 10.552), but as this was low in strength (-0.052) compared to the respective primary loading (0.645) and given that the model already showed uniformly good fit indices we decided to not add any cross-loadings to the model in this step.

**Table S16**

Confirmatory Factor Analysis Loadings of Social-Image Concerns Items

|  |  |  |
| --- | --- | --- |
| **Item** | **Social-Image Concerns about apologizing** | **Social-Image Concerns about not apologizing** |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. | .730 |  |
| If I apologised for something I’ve done wrong, I would lose respect from other people. | .703 |  |
| I would look weak to other people if I apologised for a wrongdoing. | .804 |  |
| Apologizing to another person would make that person see me as inferior to them. | .770 |  |
| Others would see me as incompetent if I apologised. | .793 |  |
| Apologizing after I have done something wrong would make me look powerless to others. | .795 |  |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. |  | .740 |
| Failing to apologise for a wrongdoing would harm my reputation. |  | .712 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. |  | .648 |
| *Note.* Shown are the standardized loadings for the final two-factor solution of the confirmatory factor analysis conducted with the social-image concerns items. | | |

In the third step, we conducted **multigroup invariance testing** with the established two-factor structure. We tested invariance both across cultural regions, and across genders (female and male). An constrained model fit as well as an unconstrained model across gender (Constrained: χ2[162] = 1162.457, CFI = .932, TLI = .937, SRMR = .0048, RMSEA = .047; Unconstrained: χ2[160] = 1174.271, CFI = .931, TLI = .933, SRMR = .048, RMSEA = .048; ΔCFI = .001) and region groups (Constrained: χ2[428] = 2024.916, CFI = .940, TLI = .945, SRMR = .047, RMSEA = .058; Unconstrained: χ2[412] = 2011.669, CFI = .939, TLI = .943, SRMR = .046, RMSEA = .060; ΔCFI = .001). We thus assumed invariance of our items across genders and regions.

In the fourth step, we conducted a **multilevel confirmatory factor** analysis to model the factor structure of our data at the between-samples level. We found that a two-factor model on the between-samples level (see Table S17) was the most theoretically meaningful, interpretable, and fit the data well (χ2[136] = 1566.034, CFI = 0.938, TLI = 0.929, RMSEA = 0.044, SRMRWithin = .066, SRMRBetween = .250). Modification indices suggested one possible cross-loadings of items related to the substantive factors (χ2 change = 34.879), but as this was low in strength (-0.075) compared to the respective primary loading (0.760) and given that the model already showed uniformly good fit indices we decided to not add any cross-loadings to the model in this step.

**Table S17**

Multilevel Confirmatory Factor Analysis Loadings of Social-Image Concerns Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Individual-Level** | | |  | **Culture-Level** | | |
| **Item** | **Social Image Concerns about apologizing** |  | **Social Image Concerns about not apologizing** |  | **Social Image Concerns about apologizing** |  | **Social Image Concerns about not apologizing** |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. | .719 |  |  |  | .911 |  |  |
| If I apologised for something I’ve done wrong, I would lose respect from other people. | .689 |  |  |  | .918 |  |  |
| I would look weak to other people if I apologised for a wrongdoing. | .796 |  |  |  | .949 |  |  |
| Apologizing to another person would make that person see me as inferior to them. | .762 |  |  |  | .925 |  |  |
| Others would see me as incompetent if I apologised. | .788 |  |  |  | .921 |  |  |
| Apologizing after I have done something wrong would make me look powerless to others. | .786 |  |  |  | .932 |  |  |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. |  |  | .709 |  |  |  | .980 |
| Failing to apologise for a wrongdoing would harm my reputation. |  |  | .683 |  |  |  | .973 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. |  |  | .628 |  |  |  | .819 |
| *Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis conducted with the social-image concerns items (two factors at the individual-level, and two factors at the culture-level). | | | | | | | |

In a fifth and final step, we then tested the possibility of **isomorphism** across levels for the final model. A constrained model in which we constrained the loadings of all items to be the same across both levels of analyses fit the data as well as an unconstrained model (Constrained: χ2[143] = 1557.800, CFI = .938, TLI = .933, SRMRWithin = .066, SRMRBetween = .272, RMSEA = .043; Unconstrained: χ2[136] = 1566.034, CFI = 0.938, TLI = 0.929, RMSEA = 0.044, SRMRWithin = .066, SRMRBetween = .250, ΔCFI = .000). We therefore decided to continue with and calculate our factor scores for reluctance to apologize based on the isomorphism model (see Table S18 for final loadings). All factors showed significant variances in the final model.

**Table S18**

Multilevel Confirmatory Factor Isomorphism Analysis Loadings of Social-Image Concern Items

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Individual-Level** | | |  | **Culture-Level** | | |
| **Item** | **Social Image Concerns about apologizing** |  | **Social Image Concerns about not apologizing** |  | **Social Image Concerns about apologizing** |  | **Social Image Concerns about not apologizing** |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. | .720 |  |  |  | .890 |  |  |
| If I apologised for something I’ve done wrong, I would lose respect from other people. | .691 |  |  |  | .871 |  |  |
| I would look weak to other people if I apologised for a wrongdoing. | .796 |  |  |  | .942 |  |  |
| Apologizing to another person would make that person see me as inferior to them. | .762 |  |  |  | .924 |  |  |
| Others would see me as incompetent if I apologised. | .786 |  |  |  | .925 |  |  |
| Apologizing after I have done something wrong would make me look powerless to others. | .787 |  |  |  | .920 |  |  |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. |  |  | .709 |  |  |  | .977 |
| Failing to apologise for a wrongdoing would harm my reputation. |  |  | .683 |  |  |  | .970 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. |  |  | .628 |  |  |  | .825 |
| *Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis for isomorphism (constraining loading strength to be equal across both levels) conducted with the social-image concerns items (two factors at the individual-level, and two factors at the culture-level). Please note that, despite the isomorphism constraints, the standardized estimates differ between levels due because the respective standardization of the (identical) unstandardized estimates is done using separate measures of standard deviations at the two levels. | | | | | | | |

### SM.4.4. Combined Self and Social-Image Concerns

In the present work, we considered self and social image concerns as tapping into different, but related facets of social functioning, and as such we established the most suitable measurement models separately for each of these facets. However, to explore whether our proposed four-way division of image concerns into self-image versus social image concerns and into concerns about apologizing versus concerns about not apologizing would also emerge in a combined analysis, we also conducted an additional set of measurement analyses for image concerns using all items together.

We first conducted an **exploratory factor analysis** to identify the underlying structure for these items at the individual level. Items were uncentered and clustered by the 28 samples made up by the combination of gender (male vs. female) and country. A four-factor solution appeared to be the most theoretically meaningful and parsimonious solution, showing excellent fit indices (χ2[87] = 266.124, CFI = .996, TLI = .993, SRMR = .008, RMSEA = .019). A one-factor solution (χ2[135] = 12124.028, CFI = .751, TLI = .718, SRMR = .131, RMSEA = .127), a two-factor solution (χ2[118] = 3856.608, CFI = .922, TLI = .899, SRMR = .040, RMSEA = .076), and a three-factor solution fit the data substantially less (χ2[102] = 821.803, CFI = .985, TLI = .978, SRMR = .019, RMSEA = .036), while a five-factor solution contained a factor without any primary loadings. As shown in Table S19, primary loadings of items were high (all above 0.6) and significant, with cross-loadings being below 0.1 for all items.

Table S19

Exploratory Factor Analysis Loadings of Self and Social-Image Concerns Items Combined

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Self-Image Concerns about apologizing** | **Social Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** | **Social Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .795 | -.038 | -.016 | .011 |
| If I apologised for something I have done wrong, I would lose respect for myself. | .804 | -.025 | .002 | .001 |
| I would see myself as weak after apologising for a wrongdoing. | .811 | .056 | .015 | -.037 |
| Apologizing to another person would make me feel inferior to that person. | .782 | .084 | .010 | .001 |
| I would see myself as incompetent if I apologized. | .844 | .014 | .001 | -.002 |
| Apologizing after I have done something wrong would make me feel powerless. | .810 | .027 | .004 | .029 |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. | .044 | -.018 | .744 | .007 |
| Failing to apologise for a wrongdoing would harm my view of myself. | .014 | .021 | .771 | -.015 |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. | -.057 | -.008 | .600 | .119 |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. | .050 | .739 | .007 | .007 |
| If I apologised for something I’ve done wrong, I would lose respect from other people. | .145 | .627 | -.019 | .048 |
| I would look weak to other people if I apologised for a wrongdoing. | -.001 | .859 | .003 | -.005 |
| Apologizing to another person would make that person see me as inferior to them. | .001 | .821 | .024 | -.006 |
| Others would see me as incompetent if I apologised. | .007 | .838 | -.006 | -.006 |
| Apologizing after I have done something wrong would make me look powerless to others. | -.012 | .860 | -.008 | -.007 |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. | .035 | -.019 | -.036 | .789 |
| Failing to apologise for a wrongdoing would harm my reputation. | .023 | .006 | .034 | .707 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. | -.079 | .031 | .081 | .628 |
| *Note.* Shown are the standardized loadings for the final four-factor solution of the exploratory factor analysis conducted with the combined self and social-image concerns items. | | | | |

In the second step, we conducted a **confirmatory factor analysis** with the four-factor structure as well as a method factor to assess acquiescence in responding (see Table S20 for primary loadings on substantive factors). Fit of the model was excellent (χ2[206] = 1334.846, CFI = .975, TLI = .972, SRMR = .062, RMSEA = .032), and loadings for all items were significant. Modification indices suggested several possible cross-loadings of items related to the substantive factors, but as these were all low in strength (< .150) compared to the respective primary loading (all > .669) and given that the model already showed uniformly good fit indices we decided to not add any cross-loadings to the model in this step.

**Table S20**

Confirmatory Factor Analysis Loadings of Self and Social-Image Concerns Items Combined

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Self-Image Concerns about apologizing** | **Social Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** | **Social Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .707 |  |  |  |
| If I apologised for something I have done wrong, I would lose respect for myself. | .729 |  |  |  |
| I would see myself as weak after apologising for a wrongdoing. | .802 |  |  |  |
| Apologizing to another person would make me feel inferior to that person. | .804 |  |  |  |
| I would see myself as incompetent if I apologized. | .803 |  |  |  |
| Apologizing after I have done something wrong would make me feel powerless. | .780 |  |  |  |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. |  | .721 |  |  |
| Failing to apologise for a wrongdoing would harm my view of myself. |  | .725 |  |  |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. |  | .669 |  |  |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. |  |  | .732 |  |
| If I apologised for something I’ve done wrong, I would lose respect from other people. |  |  | .711 |  |
| I would look weak to other people if I apologised for a wrongdoing. |  |  | .804 |  |
| Apologizing to another person would make that person see me as inferior to them. |  |  | .770 |  |
| Others would see me as incompetent if I apologised. |  |  | .794 |  |
| Apologizing after I have done something wrong would make me look powerless to others. |  |  | .794 |  |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. |  |  |  | .723 |
| Failing to apologise for a wrongdoing would harm my reputation. |  |  |  | .711 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. |  |  |  | .669 |
| *Note.* Shown are the standardized loadings for the final four-factor solution of the confirmatory factor analysis conducted with the combined self and social-image concerns items. | | | | |

In the third step, we conducted **multigroup invariance testing** with the established four-factor structure. We tested invariance both across cultural regions, and across genders (female and male). An constrained model fit as well as an unconstrained model across regions (Constrained: χ2[1196] = 3300.666, CFI = .960, TLI = .961, SRMR = .041, RMSEA = .040; Unconstrained: χ2[1124] = 3146.974, CFI = .961, TLI = .960, SRMR = .041, RMSEA = .041; ΔCFI = .001), but for gender only the constrained model converged, albeit with good fit (Constrained: χ2[470] = 1790.714, CFI = .961, TLI = .962, SRMR = .041, RMSEA = .032). We thus assumed invariance of our items across genders and regions.

In the fourth step, we conducted a **multilevel confirmatory factor** analysis to model the factor structure of our data at the between-samples level. We found that a four-factor model on the between-samples level (see Table S21) was the most theoretically meaningful, interpretable, and fit the data well (χ2[413] = 2637.262, CFI = 0.959, TLI = 0.955, RMSEA = 0.031, SRMRWithin = .056, SRMRBetween = .170). Modification indices suggested several possible cross-loadings of items related to the substantive factors, but as these were all low in strength (< .167) compared to the respective primary loading (all > .651) and given that the model already showed uniformly good fit indices we decided to not add any cross-loadings to the model in this step.

**Table S21**

Multilevel Confirmatory Factor Analysis Loadings of Self and Social-Image Concerns Items

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Individual-Level** | | | | **Culture-Level** | | | |
| **Item** | **Self-Image Concerns about apologizing** | **Social Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** | **Social Image Concerns about not apologizing** | **Self-Image Concerns about apologizing** | **Social Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** | **Social Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .696 |  |  |  | .943 |  |  |  |
| If I apologised for something I have done wrong, I would lose respect for myself. | .713 |  |  |  | .993 |  |  |  |
| I would see myself as weak after apologising for a wrongdoing. | .793 |  |  |  | .997 |  |  |  |
| Apologizing to another person would make me feel inferior to that person. | .796 |  |  |  | .983 |  |  |  |
| I would see myself as incompetent if I apologized. | .797 |  |  |  | .989 |  |  |  |
| Apologizing after I have done something wrong would make me feel powerless. | .769 |  |  |  | .981 |  |  |  |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. |  | .702 |  |  |  | .966 |  |  |
| Failing to apologise for a wrongdoing would harm my view of myself. |  | .699 |  |  |  | .998 |  |  |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. |  | .661 |  |  |  | .767 |  |  |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. |  |  | .721 |  |  |  | .956 |  |
| If I apologised for something I’ve done wrong, I would lose respect from other people. |  |  | .696 |  |  |  | .963 |  |
| I would look weak to other people if I apologised for a wrongdoing. |  |  | .796 |  |  |  | .988 |  |
| Apologizing to another person would make that person see me as inferior to them. |  |  | .764 |  |  |  | .962 |  |
| Others would see me as incompetent if I apologised. |  |  | .789 |  |  |  | .969 |  |
| Apologizing after I have done something wrong would make me look powerless to others. |  |  | .787 |  |  |  | .962 |  |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. |  |  |  | .690 |  |  |  | .996 |
| Failing to apologise for a wrongdoing would harm my reputation. |  |  |  | .683 |  |  |  | .988 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. |  |  |  | .651 |  |  |  | .813 |

*Note.* Shown are the standardized loadings for the final solution of the multilevel confirmatory factor analysis conducted with the self and social-image concerns items (four factors at the individual-level, and four factors at the culture-level).

In a fifth and final step, we then tested the possibility of **isomorphism** across levels for the final model. A constrained model in which we constrained the loadings of all items to be the same across both levels of analyses fit the data as well as an unconstrained model (Constrained: χ2[428] = 2654.491, CFI = .959, TLI = .956, SRMRWithin = .056, SRMRBetween = .180, RMSEA = .031; Unconstrained: χ2[413] = 2637.262, CFI = 0.959, TLI = 0.955, RMSEA = 0.031, SRMRWithin = .056, SRMRBetween = .170, ΔCFI = .000). All factors showed significant variances in the final model.

**Table S22**

Multilevel Confirmatory Factor Isomorphism Analysis Loadings of Self and Social-Image Concern Items

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Individual-Level** | | | | **Culture-Level** | | | |
| **Item** | **Self-Image Concerns about apologizing** | **Social Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** | **Social Image Concerns about not apologizing** | **Self-Image Concerns about apologizing** | **Social Image Concerns about apologizing** | **Self-Image Concerns about not apologizing** | **Social Image Concerns about not apologizing** |
| Apologizing for a wrongdoing would harm my view of myself. | .697 |  |  |  | .920 |  |  |  |
| If I apologised for something I have done wrong, I would lose respect for myself. | .716 |  |  |  | .971 |  |  |  |
| I would see myself as weak after apologising for a wrongdoing. | .793 |  |  |  | .997 |  |  |  |
| Apologizing to another person would make me feel inferior to that person. | .795 |  |  |  | .984 |  |  |  |
| I would see myself as incompetent if I apologized. | .795 |  |  |  | .983 |  |  |  |
| Apologizing after I have done something wrong would make me feel powerless. | .770 |  |  |  | .978 |  |  |  |
| If I failed to apologise for something I have done wrong, I would lose respect for myself. |  | .702 |  |  |  | .966 |  |  |
| Failing to apologise for a wrongdoing would harm my view of myself. |  | .701 |  |  |  | .994 |  |  |
| If I did not apologise for something I did wrong, I would think of myself as lacking integrity. |  | .659 |  |  |  | .826 |  |  |
| Apologizing for wrongdoings would harm my reputation in the eyes of other people. |  |  | .722 |  |  |  | .925 |  |
| If I apologised for something I’ve done wrong, I would lose respect from other people. |  |  | .698 |  |  |  | .906 |  |
| I would look weak to other people if I apologised for a wrongdoing. |  |  | .797 |  |  |  | .979 |  |
| Apologizing to another person would make that person see me as inferior to them. |  |  | .763 |  |  |  | .959 |  |
| Others would see me as incompetent if I apologised. |  |  | .788 |  |  |  | .960 |  |
| Apologizing after I have done something wrong would make me look powerless to others. |  |  | .787 |  |  |  | .951 |  |
| If I failed to apologise for something I have done wrong, I would lose others’ respect. |  |  |  | .691 |  |  |  | .992 |
| Failing to apologise for a wrongdoing would harm my reputation. |  |  |  | .683 |  |  |  | .984 |
| If I did not apologise for something I did wrong, people would see me as lacking integrity. |  |  |  | .649 |  |  |  | .841 |

*Note.* Shown are the standardized loadings for the final solution of the isomorphic multilevel confirmatory factor analysis conducted with the self and social-image concerns items (four factors at the individual-level, and four factors at the culture-level).

## SM.6. Preregistration Information

All hypotheses and analytical steps were preregistered on the Open Science Framework (<https://osf.io/cew5x/?view_only=bf85cbb0cab3469ca246367cdd1998a6>).

At the time of the preregistration, all data had been collected but none of the preregistered analyses had been run, with the exception of the measurement models used for personal and perceived normative honor endorsement (which were described in a different manuscript focusing on the prevalence of honor in the Mediterranean; Vignoles et al., currently under review at PSPB).

### SM.6.1. Deviations from the Preregistration

Here we would like to outline any adjustments from the original pre-registration plan and provide theoretical considerations and justifications for our choices.

* **Use of relative measures for image concerns**: We pre-registered to test our hypotheses H2a and H2b using separate mediators for self-image and social-image concerns at both levels. However, for both self and social image concerns, our measurement models unexpectedly showed that a two-factor solution separating a factor for *image concerns of apologizing* and a factor for *image concerns of not apologizing* fit the data better than a one-factor solution at both within-cultures and between-cultures levels of analysis (suggesting that the three additional items regarding failures to apologize did not function as reversed items on a unidimensional scale as we had expected). As outlined in the main manuscript, we therefore decided to continue by calculating a relative measures (i.e., the score for image concerns of apologizing minus the score for image concerns following not apologizing, separately for self and social image concerns) to test our hypotheses.
* **Exclusion of participants based on open-ended text responses:** We pre-registered only to exclude participants from our dataset if they did not meet our eligibility criteria or did not report the same age in both age questions (for Canada only). In preparation for our data analysis, we decided to check the open-ended responses given by participants to describe their apology situation as well as any open-ended descriptions of alternative reconciliatory behaviors (if not having offered an apology). As a consequence, we excluded 165 participants (who showed potential problems in their open-ended description of the apology situation) from analyses that included the recalled apology behavior as a dependent variable (*N* = 5,306). Furthermore, we excluded those participants as well as an additional 20 participants (who showed potential problems in their open-ended description of the alternative apology behavior) from analyses that examined the alternative reconciliatory behaviors (*N* = 1,350; only participants that reported not offering an apology). A series of robustness analyses showed that the pattern of mediation results remained the same if these participants were excluded from all analyses.

## SM.7. Descriptive Statistics by Country

**Table S23**

Culture-Level Descriptive Statistics (Between-Sample Variables)

| **Country** | **Gender** | **Personal Honor** | **Perceived Normative Honor** | **Self Image Concerns - Apologizing** | **Self Image Concerns - Not Apologizing** | **Social Image Concerns - Apologizing** | **Social Image Concerns - Not Apologizing** | **Reluctance to Apologize** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Canada | Male | -0.38 | -0.3 | -0.17 | -0.18 | 0 | 0.61 | -0.23 |
| Canada | Female | -0.7 | -0.58 | -0.52 | 0.2 | -0.39 | 0.6 | -0.47 |
| Turkish Cypriot Community | Male | 0.43 | 0.3 | -0.57 | -1.51 | -0.81 | -1.64 | 0.09 |
| Turkish Cypriot Community | Female | 0.21 | 0.28 | -0.38 | -1.29 | -0.58 | -1.47 | 0.33 |
| Greek Cypriot Community | Male | -0.18 | 0.12 | -0.04 | 0.07 | 0.2 | 0.14 | -0.09 |
| Greek Cypriot Community | Female | -0.4 | -0.06 | -0.17 | 0.21 | -0.01 | 0.01 | -0.17 |
| Egypt | Male | 0.88 | 0.6 | -0.4 | -0.51 | -0.33 | -0.51 | 0.05 |
| Egypt | Female | 0.79 | 0.64 | -0.31 | -0.18 | -0.31 | -0.61 | -0.05 |
| Greece | Male | -0.15 | -0.03 | 0.28 | 0.27 | 0.48 | 0.26 | 0.34 |
| Greece | Female | -0.52 | -0.06 | 0.33 | 0.46 | 0.44 | 0.3 | 0.11 |
| Italy | Male | -0.05 | -0.09 | 0.22 | 0.44 | 0.12 | 0.14 | 0.03 |
| Italy | Female | -0.41 | -0.34 | 0.07 | 0.48 | -0.07 | 0.05 | 0.01 |
| Japan | Male | 0.02 | -0.19 | 0.63 | 0.73 | 0.56 | 0.81 | 0.12 |
| Japan | Female | -0.1 | -0.35 | 0.44 | 0.7 | 0.36 | 0.98 | -0.18 |
| Korea | Male | -0.08 | -0.19 | 0.69 | 0.23 | 0.51 | 0.37 | 0.31 |
| Korea | Female | -0.25 | -0.39 | 0.44 | 0.24 | 0.31 | 0.31 | 0.22 |
| Lebanon | Male | 0.61 | 0.52 | -0.16 | -0.39 | 0.02 | -0.37 | 0.07 |
| Lebanon | Female | 0.47 | 0.49 | -0.22 | -0.45 | -0.16 | -0.44 | 0.03 |
| Spain | Male | 0.03 | 0 | 0.27 | 0.53 | 0.12 | 0.29 | -0.12 |
| Spain | Female | -0.25 | -0.21 | 0.04 | 0.67 | -0.14 | 0.43 | -0.24 |
| Tunisia | Male | 0.58 | 0.58 | -0.38 | -0.45 | -0.08 | -0.53 | -0.05 |
| Tunisia | Female | 0.63 | 0.56 | -0.41 | -0.67 | -0.12 | -0.76 | -0.04 |
| Turkey | Male | 0.1 | -0.03 | -0.03 | -0.54 | -0.07 | -0.32 | 0.01 |
| Turkey | Female | -0.12 | -0.05 | -0.2 | 0.03 | -0.34 | 0.09 | -0.14 |
| UK | Male | -0.34 | -0.37 | 0.24 | 0.19 | 0.28 | 0.52 | 0.12 |
| UK | Female | -0.49 | -0.4 | -0.03 | 0.3 | -0.13 | 0.4 | -0.22 |
| United States | Male | -0.04 | -0.16 | 0.38 | 0.27 | 0.23 | 0.19 | 0.17 |
| United States | Female | -0.27 | -0.3 | -0.02 | 0.14 | -0.1 | 0.15 | -0.01 |

*Note.* Valuesrepresent factor scores for our 28 cultural groups taken from the final measurement models. Please note that these values are therefore only meaningful relative to each other (not in absolute) and do not have any standard deviation.

## SM.8. Parameter Estimates for Mediation Analyses: Country Clustering

**Table S24**

Parameter Estimates for Two Mediator Models Involving Perceived Normative Honor Endorsement (Clustered by Countries, Controlling for Gender)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2) | .518 | .246 | .035\* | .036, 1.00 | .448 |  | .981 | .224 | < .001\* | .542, 1.421 | .786 |  | .518 | .246 | .035\* | .036, 1.00 | .448 |  | .981 | .224 | < .001\* | .542, 1.421 | .786 |
| Image Concerns 🡪 Outcome (b1/2) | .168 | .014 | < .001\* | .141, .195 | .481 |  | .101 | .012 | < .001\* | .077, .125 | .313 |  | -.050 | .031 | .109 | -.112, .011 | -.359 |  | -.114 | .028 | < .001\* | -.168, -.060 | -.876 |
| Honor 🡪 Outcome (c'1) | -.097 | .081 | .229 | -.255, .061 | -.241 |  | - | - | - | - | - |  | .232 | .100 | .021\* | .036, .429 | 1.434 |  | - | - | - | - | - |
| Total effect (c1) | .089 | .110 | .417 | -.126, .305 | .221 |  | - | - | - | - | - |  | .095 | .118 | .421 | -.136, .325 | .584 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .087 | .040 | .028\* | .009, .164 | .216 |  | .099 | .028 | < .001\* | .027, .154 | .246 |  | -.026 | .016 | .095 | -.057, .005 | -.161 |  | -.112 | .031 | < .001\* | -.172, -.051 | -.689 |
| Correlation/Covariance Mediators | .071 | .034 | .037\* | .004, .137 | .756 |  | - | - | - | - | - |  | .071 | .034 | .037\* | .004, .137 | .756 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 20.1% |  |  |  |  |  | 61.8% |  |  |  |  |  | 21.1% |  |  |  |  |  | 61.8% |  |  |
| *R2* (Outcome) |  |  | 39.7% |  |  |  |  |  | - |  |  |  |  |  | 1.9% |  |  |  |  |  | - |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b) | .168 | .014 | < .001\* | .141, .195 | .314 |  | .101 | .012 | < .001\* | .077, .125 | .176 |  | -.050 | .031 | .109 | -.112, .011 | -.338 |  | -.114 | .028 | < .001\* | -.168, -.060 | -.708 |
| Gender 🡪 Outcome | -.070 | .026 | .006\* | -.120, -.020 | -.036 |  | - | - | - | - | - |  | -.170 | .086 | .049\* | -.338, -.001 | -.316 |  | - | - | - | - | - |
| Gender 🡪 Image Concerns | -.304 | .065 | < .001\* | -.432, -.176 | -.084 |  | -.233 | .059 | < .001\* | -.349, -.117 | -.070 |  | -.313 | .062 | < .001\* | -.434, -.192 | -.087 |  | -.243 | .065 | < .001\* | -.371, -.115 | -.073 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a3/4) | .399 | .075 | < .001\* | .252, .547 | .191 |  | .429 | .064 | < .001\* | .303, .554 | .222 |  | .408 | .072 | < .001\* | .267, .550 | .197 |  | .436 | .064 | < .001\* | .312, .561 | .226 |
| Self-Promotion 🡪 Outcome (c’2) | .083 | .029 | < .001\* | .026, .139 | .074 |  | - | - | - | - | - |  | -.029 | .060 | .627 | -.148, .089 | -.095 |  | - | - | - | - | - |
| Total effect (c2) | .193 | .043 | < .001\* | .109, .277 | .173 |  | - | - | - | - | - |  | -.100 | .053 | .062 | -.204, .005 | -.322 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .067 | .013 | < .001\* | .041, .093 | .060 |  | .043 | .011 | < .001\* | .022, .065 | .039 |  | -.021 | .013 | .126 | -.047, .006 | -.067 |  | -.050 | .013 | < .001\* | -.076, -.023 | -.160 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a5/6) | -.785 | .073 | < .001\* | -.929, -.642 | -.400 |  | -.739 | .071 | < .001\* | -.879, -.600 | -.406 |  | -.794 | .072 | < .001\* | -.936, -.652 | -.403 |  | -.749 | .069 | < .001\* | -.884, -.614 | -.410 |
| Family Defense 🡪 Outcome (c’3) | -.160 | .031 | < .001\* | -.220, -.100 | -.153 |  | - | - | - | - | - |  | .006 | .071 | .938 | -.135, .146 | .019 |  | - | - | - | - | - |
| Total effect (c3) | -.366 | .036 | < .001\* | -.437, -.295 | -.350 |  | - | - | - | - | - |  | .131 | .059 | .027\* | .015, .247 | .445 |  | - | - | - | - | - |
| Indirect effect (a5/6 \* b3/4) | -.132 | .019 | < .001\* | -.169, -.094 | -.126 |  | -.075 | .014 | < .001\* | -.102, -.047 | -.071 |  | .040 | .026 | .118 | -.010, .090 | .136 |  | .085 | .021 | < .001\* | .044, .127 | .290 |
| Correlation/Covariance Mediators | 1.716 | .075 | < .001\* | 1.568, 1.864 | .635 |  | - | - | - | - | - |  | 1.701 | .071 | < .001\* | 1.561, 1.841 | .634 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 10.6% |  |  |  |  |  | 10.5% |  |  |  |  |  | 10.8% |  |  |  |  |  | 10.7% |  |  |
| *R2* (Outcome) |  |  | 25.9% |  |  |  |  |  | - |  |  |  |  |  | 2.1% |  |  |  |  |  | - |  |  |

*Note*. \* *p* < .05.

**Table S25**

Parameter Estimates for Two Mediator Models Involving Personal Honor Endorsement (Clustered by Countries, Controlling for Gender)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personal Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2) | .473 | .217 | .029\* | .048, .897 | .478 |  | .752 | .217 | .001\* | .327, 1.176 | .704 |  | .473 | .217 | .029\* | .048, .897 | .478 |  | .752 | .217 | .001\* | .327, 1.176 | .704 |
| Image Concerns 🡪 Outcome (b1/2) | .164 | .015 | < .001\* | .135, .192 | .462 |  | .102 | .013 | < .001\* | .076, .127 | .310 |  | -.047 | .034 | .169 | -.11, .020 | -.215 |  | -.110 | .028 | < .001\* | -.165, -.055 | -.545 |
| Honor 🡪 Outcome (c'1) | -.067 | .76 | .380 | -.216, .082 | -.191 |  | - | - | - | - | - |  | -.077 | .053 | .146 | -.181, .027 | -.358 |  | - | - | - | - | - |
| Total effect (c1) | .087 | .098 | .377 | -.106, .280 | .248 |  | - | - | - | - | - |  | -.182 | .071 | .010\* | -.321, -.043 | -.845 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .077 | .033 | .019\* | .013, .142 | .221 |  | .076 | .025 | .002\* | .027, .126 | .218 |  | -.022 | .015 | .144 | -.052, .008 | -.103 |  | -.083 | .025 | .001\* | -.131, -.035 | -.384 |
| Correlation/Covariance Mediators | .074 | .037 | .045\* | .002, .145 | .695 |  | - | - | - | - | - |  | .074 | .037 | .045\* | .002, .145 | .695 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 22.9% |  |  |  |  |  | 49.6% |  |  |  |  |  | 22.9% |  |  |  |  |  | 49.6% |  |  |
| *R2* (Outcome) |  |  | 39.8% |  |  |  |  |  | - |  |  |  |  |  | 4.6% |  |  |  |  |  | - |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b1/2) | .164 | .015 | < .001\* | .135, .192 | .307 |  | .102 | .013 | < .001\* | .076, .127 | .177 |  | -.047 | .034 | .169 | -.114, .020 | -.316 |  | -.110 | .028 | < .001\* | -.165, -.055 | -.688 |
| Gender 🡪 Outcome | -.062 | .025 | .012\* | -.111, -.014 | -.032 |  | - | - | - | - | - |  | -.174 | .089 | .051 | -.348, .000 | -.325 |  | - | - | - | - | - |
| Gender 🡪 Image Concerns | -.227 | .045 | < .001\* | -.315, -.140 | -.063 |  | -.173 | .043 | < .001\* | -.258, -.088 | -.052 |  | -.223 | .038 | < .001\* | -.298, -.148 | -.062 |  | -.172 | .049 | < .001\* | -.269, -.075 | -.051 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a3/4) | .837 | .091 | < .001\* | .659, 1.015 | .385 |  | .704 | .080 | < .001\* | .547, .861 | .349 |  | .847 | .097 | < .001\* | .656, 1.038 | .390 |  | .717 | .090 | < .001\* | .541, .893 | .356 |
| Self-Promotion 🡪 Outcome (c’2) | .114 | .025 | < .001\* | .065, .163 | .099 |  | - | - | - | - | - |  | -.046 | .071 | .515 | -.184, .092 | -.143 |  | - | - | - | - | - |
| Total effect (c2) | .323 | .044 | < .001\* | .236, .410 | .278 |  | - | - | - | - | - |  | -.164 | .056 | .003\* | -.275, -.054 | -.511 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .137 | .020 | < .001\* | .099, .176 | .118 |  | .072 | .015 | < .001\* | .042, .101 | .062 |  | -.040 | .030 | .188 | -.099, .019 | -.123 |  | -.079 | .019 | < .001\* | -.116, -.041 | -.245 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a5/6) | -.763 | .059 | < .001\* | -.878, -.648 | -.412 |  | -.666 | .057 | < .001\* | -.777, -.554 | -.387 |  | -.751 | .060 | < .001\* | -.869, -.632 | -.404 |  | -.660 | .060 | < .001\* | -.778, -.542 | -.382 |
| Family Defense 🡪 Outcome (c’3) | -.128 | .021 | < .001\* | -.170, -.087 | -.130 |  | - | - | - | - | - |  | .013 | .062 | .837 | -.109, .134 | .046 |  | - | - | - | - | - |
| Total effect (c3) | -.321 | .029 | < .001\* | -.378, -.265 | -.325 |  | - | - | - | - | - |  | .120 | .051 | .018\* | .020, .220 | .437 |  | - | - | - | - | - |
| Indirect effect (a5/6 \* b3/4) | -.125 | .015 | < .001\* | -.155, -.095 | -.126 |  | -.068 | .012 | < .001\* | -.091, -.044 | -.068 |  | .035 | .026 | .170 | -.015, .085 | .128 |  | .072 | .018 | < .001\* | .036, .108 | .263 |
| Correlation/Covariance Mediators | 1.568 | .055 | < .001\* | 1.478, 1.694 | .617 |  | - | - | - | - | - |  | 1.579 | .060 | < .001\* | 1.462, 1.696 | .617 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 16.1% |  |  |  |  |  | 13.7% |  |  |  |  |  | 15.9% |  |  |  |  |  | 13.7% |  |  |
| *R2* (Outcome) |  |  | 25.8% |  |  |  |  |  | - |  |  |  |  |  | 2.1% |  |  |  |  |  | - |  |  |

*Note*. \* *p* < .05.

## SM.9. Parameter Estimates for Mediation Analyses with Strictest Exclusion Criteria

**Table S26**

Parameter Estimates for Two Mediator Models Involving Perceived Normative Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2) | .500 | .169 | .003\* | .637, .739 | .460 |  | .944 | .156 | < .001\* | .638, 1.251 | .762 |  | .500 | .169 | .003\* | .168, .831 | .460 |  | .944 | .156 | < .001\* | .638, 1.251 | .762 |
| Image Concerns 🡪 Outcome (b1/2) | .167 | .011 | < .001\* | .145, .189 | .401 |  | .101 | .013 | < .001\* | .077, .126 | .278 |  | -.048 | .028 | .082 | -.103, .006 | -.391 |  | -.115 | .027 | < .001\* | -.168, -.062 | -1.058 |
| Honor 🡪 Outcome (c'1) | -.063 | .069 | .363 | -.199, .073 | -.139 |  | - | - | - | - | - |  | -.107 | .200 | .592 | -.285, .499 | .798 |  | - | - | - | - | - |
| Total effect (c1) | .116 | .096 | .224 | -.071, .303 | .257 |  | - | - | - | - | - |  | -.025 | .209 | .903 | -.435, .384 | -.188 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .083 | .028 | .003\* | .029, .138 | .185 |  | .096 | .021 | < .001\* | .055, .136 | .212 |  | -.024 | .014 | .092 | -.052, .004 | -.180 |  | -.108 | .027 | < .001\* | -.161, -.056 | -.806 |
| Correlation/Covariance Mediators | .076 | .024 | .002\* | .029, .123 | .787 |  | - | - | - | - | - |  | .076 | .024 | < .001\* | .029, .123 | .787 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 21.2% |  |  |  |  |  | 58.1% |  |  |  |  |  | 21.2% |  |  |  |  |  | 58.1% |  |  |
| *R2* (Outcome) |  |  | 32.6% |  |  |  |  |  |  |  |  |  |  |  | 1.2% |  |  |  |  |  |  |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b3/4) | .167 | .011 | < .001\* | .145, .189 | .311 |  | .101 | .013 | < .001\* | .077, .126 | .175 |  | -.048 | .028 | .082 | -.103, .006 | -.335 |  | -.115 | .027 | < .001\* | -.168, -.062 | -.737 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a3/4) | .394 | .062 | < .001\* | .272, .515 | .190 |  | .422 | .051 | < .001\* | .322, .521 | .219 |  | .398 | .059 | < .001\* | .282, .514 | .192 |  | .431 | .051 | < .001\* | .331, .530 | .223 |
| Self-Promotion 🡪 Outcome (c’2) | .083 | .023 | < .001\* | .038, .128 | .074 |  | - | - | - | - | - |  | -.030 | .058 | .601 | -.143, .083 | -.101 |  | - | - | - | - | - |
| Total effect (c2) | .191 | .034 | < .001\* | .124, .258 | .172 |  | - | - | - | - | - |  | -.099 | .056 | .077 | -.208, .011 | -.330 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .066 | .011 | < .001\* | .045, .087 | .059 |  | .043 | .009 | < .001\* | .024, .061 | .038 |  | -.019 | .012 | .102 | -.042, .004 | -.064 |  | -.049 | .012 | < .001\* | -.074, -.025 | -.164 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a5/6) | -.781 | .059 | < .001\* | -.897, -.665 | -.401 |  | -.732 | .057 | < .001\* | -.845, -.619 | -.405 |  | -.791 | .057 | < .001\* | -.903, -.679 | -.402 |  | -.747 | .055 | < .001\* | -.854, -.639 | -.409 |
| Family Defense 🡪 Outcome (c’3) | -.160 | .026 | < .001\* | -.211, -.109 | -.153 |  | - | - | - | - | - |  | .008 | .062 | .902 | -.114, .129 | .027 |  | - | - | - | - | - |
| Total effect (c3) | -.365 | .033 | < .001\* | -.430, -.299 | -.349 |  | - | - | - | - | - |  | .131 | .059 | .026\* | .016, .247 | .463 |  | - | - | - | - | - |
| Indirect effect (a5/6 \* b3/4) | -.130 | .015 | < .001\* | -.159, -.102 | -.125 |  | -.074 | .013 | < .001\* | -.100, -.048 | -.071 |  | .038 | .023 | .090 | -.006, .082 | .135 |  | .086 | .020 | < .001\* | .046, .125 | .301 |
| Correlation/Covariance Mediators | 1.696 | .054 | < .001\* | 1.590, 1.802 | .634 |  | - | - | - | - | - |  | 1.681 | .054 | < .001\* | 1.584, 1.797 | .634 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 10.1% |  |  |  |  |  | 10.0% |  |  |  |  |  | 10.2% |  |  |  |  |  | 10.3% |  |  |
| *R2* (Outcome) |  |  | 25.3% |  |  |  |  |  |  |  |  |  |  |  | 1.2% |  |  |  |  |  |  |  |  |

*Note*. \* *p* < .05.

**Table S27**

Parameter Estimates for Two Mediator Models Involving Personal Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personal Endorsement**  **of Honor** | **Reluctance to Apologize (DV)** | | | | | | | | | | |  | **Offered Apologies (DV)** | | | | | | | | | | |
| **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |  | **Self-Image Concerns** | | | | |  | **Social-Image Concerns** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2) | .478 | .147 | .001\* | .189, .766 | .519 |  | .723 | .152 | < .001\* | .424, 1.022 | .689 |  | .478 | .147 | .001\* | .189, .766 | .519 |  | .723 | .152 | < .001\* | .424, 1.022 | .689 |
| Image Concerns 🡪 Outcome (b1/2) | .164 | .012 | < .001\* | .141, .186 | .386 |  | .102 | .013 | < .001\* | .076, .128 | .274 |  | -.044 | .029 | .127 | -.101, .013 | -.296 |  | -.112 | .027 | < .001\* | -.166, -.059 | -.853 |
| Honor 🡪 Outcome (c'1) | -.033 | .058 | .571 | -.146, .081 | -.084 |  | - | - | - | - | - |  | .023 | .132 | .861 | -.236, .282 | .168 |  | - | - | - | - | - |
| Total effect (c1) | .119 | .077 | .125 | -.033, .271 | .305 |  | - | - | - | - | - |  | -.079 | .143 | .579 | -.359, .201 | -.573 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .078 | .023 | .001\* | .033, .124 | .200 |  | .074 | .018 | < .001\* | .038, .109 | .189 |  | -.021 | .014 | .119 | -.048, .005 | -.154 |  | -.081 | .021 | < .001\* | -.121, -.041 | -.588 |
| Correlation/Covariance Mediators | .075 | .026 | .004\* | .024, .125 | .719 |  | - | - | - | - | - |  | .075 | .026 | .004\* | .024, .125 | .719 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 26.9% |  |  |  |  |  | 47.4% |  |  |  |  |  | 26.9 % |  |  |  |  |  | 47/.4% |  |  |
| *R2* (Outcome) |  |  | 33.6% |  |  |  |  |  |  |  |  |  |  |  | 1.8% |  |  |  |  |  |  |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b3/4) | .164 | .012 | < .001\* | .141, .186 | .305 |  | .102 | .013 | < .001\* | .076, .128 | .176 |  | -.044 | .029 | .127 | -.101, .013 | -.307 |  | -.112 | .027 | < .001\* | -.166, -.059 | -.721 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a3/4) | .838 | .073 | < .001\* | .696, .981 | .381 |  | .705 | .073 | < .001\* | .578, .831 | .345 |  | .841 | .075 | < .001\* | .694, .988 | .383 |  | .715 | .069 | < .001\* | .580, .850 | .351 |
| Self-Promotion 🡪 Outcome (c’2) | .112 | .020 | < .001\* | .072, .151 | .095 |  | - | - | - | - | - |  | -.048 | .060 | .424 | -.164, 069 | -.150 |  | - | - | - | - | - |
| Total effect (c2) | .321 | .034 | < .001\* | .253, .388 | .272 |  | - | - | - | - | - |  | -.165 | .055 | .002\* | -.272, -.058 | -.521 |  | - | - | - | - | - |
| Indirect effect (a1/2 \* b1/2) | .137 | .016 | < .001\* | .107, .168 | .116 |  | .072 | .014 | < .001\* | .045, .099 | .061 |  | -.037 | .025 | .143 | -.087, .013 | -.118 |  | -.080 | .019 | < .001\* | -.117, -.044 | -.254 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a5/6) | -.752 | .053 | < .001\* | -.856, -.648 | -.406 |  | -.657 | .048 | < .001\* | -.751, -.563 | -.382 |  | -.750 | .052 | < .001\* | -.851, -.649 | -.402 |  | -.660 | .048 | < .001\* | -.754, -.565 | -.381 |
| Family Defense 🡪 Outcome (c’3) | -.129 | .019 | < .001\* | -.166, -.091 | -.130 |  | - | - | - | - | - |  | .014 | .054 | .793 | -.091, .119 | .052 |  | - | - | - | - | - |
| Total effect (c3) | -.319 | .026 | < .001\* | -.370, -.268 | -.321 |  | - | - | - | - | - |  | .121 | .051 | .017\* | .022, .221 | .450 |  | - | - | - | - | - |
| Indirect effect (a5/6 \* b3/4) | -.123 | .013 | < .001\* | -.149, -.097 | -.124 |  | -.067 | .011 | < .001\* | -.089, -.045 | -.067 |  | .033 | .022 | .131 | -.101, .076 | .123 |  | .074 | .018 | < .001\* | .039, .110 | .275 |
| Correlation/Covariance Mediators | 1.573 | .046 | < .001\* | 1.482, 1.664 | .617 |  | - | - | - | - | - |  | 1.570 | .047 | < .001\* | 1.478, 1.662 | .616 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 15.3% |  |  |  |  |  | 13.1% |  |  |  |  |  | 15.3% |  |  |  |  |  | 15.3% |  |  |
| *R2* (Outcome) |  |  | 25.1% |  |  |  |  |  |  |  |  |  |  |  | 2.0% |  |  |  |  |  |  |  |  |

*Note*. \* *p* < .05.

## SM.10. Exploratory Analyses: Separating Image Concerns about Apologizing versus Not Apologizing

As a set of further analyses exploring implications of our decision to use difference scores for image concerns, we ran an alternative series of analyses in which we included image concerns about apologizing and image concerns about not apologizing as separate, simultaneous mediators (instead of combining them into difference scores for social image and self-image concerns respectively; see tables 28 to 32 below for descriptives and model information).

At the *cultural level of analysis*, the links between honor (personal and perceived normative) and reluctance to apologize were mediated by a negative indirect path through self- and social image concerns about apologizing, and a positive indirect path through self- and social image concerns about not apologizing. The links between honor and lower incidence of offered apologies were mediated negatively only by lower social image concerns about not apologizing.

One reason for these seemingly contradictory pathways is that members of higher honor cultures tended to report lower self- and social image concerns on both dimensions—in other words, irrespective of whether or not they apologized, members of these cultural groups were seemingly less willing to admit that their self or social image might be affected by a situation in which they had committed a misdeed. This is consistent with theoretical proposals that members of “honor cultures” would be more defensive of their self and social image in general. However, a closer look at the model parameters shows that as honor culture increases, self-reported concerns about the impact of failing to apologize reduce more steeply than concerns about the impact of apologizing (see Figures S1 and S2). Thus, on balance, members of cultures with stronger honor norms and values were less likely to see greater risks to their self- and social image of not apologizing compared to the risks of apologizing (see Table S28 for the percentages in each sample)—which is in line with our predictions.

At the *individual level of analysis*, we found that all concerns mediated the link between personal values of self-promotion & retaliation and reluctance to apologize positively, whereas all concerns mediated the link between personal values of defense of family reputation and reluctance to apologize negatively - largely matching our main findings. The corresponding findings for perceived normative values were similar except that participants who perceived that self-promotion & retaliation values were more normative also tended to report slightly lower social image concerns about not apologizing (but showed no relationship with self-image concerns about not apologizing). The pattern for offered apologies at the individual level only showed significant mediation effects for social image concerns: whereas the link between self-promotion & retaliation and offered apologies was negatively mediated only by social image concerns about apologizing, the link between defense of family reputation and offered apologies was consistently positively mediated by both types of social image concerns.

**Table S28**

Mean image concerns (raw scores) about apologizing or failing to apologize for each cultural group, and percentages of participants in each group who reported higher image concerns about apologizing than about not apologizing.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Gender |  | Self-image concerns | | |  | Social image concerns | | |
|  | Apologizing | Not apologizing | % more concerned about apologizing than not |  | Apologizing | Not apologizing | % more concerned about apologizing than not |
| Canada | Women |  | 1.64 | 4.99 | 4.8 |  | 2.02 | 5.19 | 4.3 |
| Canada | Men |  | 2.05 | 4.44 | 8.7 |  | 2.47 | 5.17 | 4.6 |
| Turkish Cypriot Community | Women |  | 2.36 | 3.52 | 30.3 |  | 2.24 | 3.39 | 27.1 |
| Turkish Cypriot Community | Men |  | 2.01 | 3.29 | 26.4 |  | 1.88 | 3.11 | 20.8 |
| Greek Cypriot Community | Women |  | 2.01 | 4.71 | 6.8 |  | 2.54 | 4.41 | 12.2 |
| Greek Cypriot Community | Men |  | 2.20 | 4.53 | 12.9 |  | 2.74 | 4.48 | 19.0 |
| Egypt | Women |  | 1.93 | 4.49 | 11.2 |  | 2.20 | 3.98 | 13.8 |
| Egypt | Men |  | 1.83 | 4.25 | 8.5 |  | 2.11 | 4.11 | 8.5 |
| Greece | Women |  | 2.63 | 5.11 | 15.0 |  | 3.08 | 4.77 | 21.6 |
| Greece | Men |  | 2.77 | 4.96 | 13.5 |  | 3.26 | 4.85 | 20.1 |
| Italy | Women |  | 2.50 | 5.26 | 10.1 |  | 2.63 | 4.69 | 11.0 |
| Italy | Men |  | 2.74 | 5.24 | 15.0 |  | 2.89 | 4.81 | 20.0 |
| Japan | Women |  | 2.66 | 5.28 | 12.1 |  | 2.81 | 5.48 | 9.0 |
| Japan | Men |  | 2.90 | 5.20 | 12.5 |  | 3.01 | 5.27 | 14.0 |
| Korea | Women |  | 2.91 | 4.92 | 15.5 |  | 2.98 | 4.93 | 15.5 |
| Korea | Men |  | 3.17 | 4.83 | 18.2 |  | 3.15 | 4.94 | 19.2 |
| Lebanon | Women |  | 1.90 | 4.24 | 9.1 |  | 2.19 | 4.10 | 13.1 |
| Lebanon | Men |  | 1.93 | 4.15 | 11.5 |  | 2.37 | 4.08 | 14.5 |
| Spain | Women |  | 2.49 | 5.41 | 11.5 |  | 2.44 | 5.08 | 8.0 |
| Spain | Men |  | 2.67 | 5.17 | 15.7 |  | 2.71 | 4.84 | 10.2 |
| Tunisia | Women |  | 1.79 | 4.14 | 10.2 |  | 2.32 | 3.99 | 17.3 |
| Tunisia | Men |  | 1.91 | 4.47 | 9.5 |  | 2.52 | 4.28 | 16.5 |
| Turkey | Women |  | 2.23 | 4.73 | 13.5 |  | 2.23 | 4.53 | 10.5 |
| Turkey | Men |  | 2.26 | 4.07 | 17.5 |  | 2.38 | 3.97 | 20.0 |
| UK | Women |  | 2.29 | 5.03 | 9.0 |  | 2.39 | 4.99 | 9.0 |
| UK | Men |  | 2.55 | 4.85 | 14.0 |  | 2.86 | 5.03 | 13.0 |
| United States | Women |  | 2.45 | 4.94 | 12.6 |  | 2.61 | 4.92 | 11.6 |
| United States | Men |  | 3.13 | 5.12 | 18.6 |  | 3.19 | 5.08 | 19.1 |

**Figure S1**

Scatterplot of Perceived Normative Honor Values against Types of Image Concerns

A screenshot of a graph

Description automatically generated

*Note*. Blue circles and lines represent image concerns about apologizing, red circles and lines represent image concerns about failing to apologize.

**Table S29**

Parameter Estimates for Simultaneous Mediator Models (Concerns about Apologizing and Failing to Apologize) Predicting Reluctance to Apologize and Involving Perceived Normative Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative  Endorsement of Honor** | **Self-Image Concerns** | | | | | | | | | | |  | **Social-Image Concerns** | | | | | | | | | | |
| **Apologizing (1)** | | | | |  | **Failure to Apologize (2)** | | | | |  | **Apologizing (3)** | | | | |  | **Failure to Apologize (4)** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2/3/4) | -.511 | .163 | .002\* | -.829, -.192 | -.527 |  | -1.010 | .190 | <.001\* | -1.382, -.0638 | -.647 |  | -.351 | .147 | .017\* | -.639, -.062 | -.377 |  | -1.295 | .186 | <.001\* | -1.660, -.930 | -.752 |
| Image Concerns 🡪 Outcome (b1/2/3/4) | .268 | .020 | <.001\* | .229, .308 | .619 |  | -.097 | .011 | <.001\* | -.119, -.076 | -.362 |  | .115 | .019 | <.001\* | .078, .153 | .255 |  | -.061 | .012 | <.001\* | -.085, -.037 | -.249 |
| Honor 🡪 Outcome (c'1) | .116 | .058 | .044\* | .003, .230 | .277 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c1) | .116 | .096 | .224 | -.071, .303 | .276 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a1/2/3/4 \* b1/2/3/4) | -.137 | .041 | .001\* | -.217, -.057 | -.326 |  | .098 | .021 | <.001\* | .058, .139 | .234 |  | -.040 | .020 | .042\* | -.079, -.001 | -.096 |  | .116 | .058 | .044\* | .037, .121 | .187 |
| Correlation/Covariance Mediators: (2) | .072 | .024 | .002\* | .026, .118 | .593 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .077 | .021 | <.001\* | .035, .119 | .875 |  | .084 | .035 | .017\* | .015, .154 | .663 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .058 | .023 | .010\* | .014, .103 | .503 |  | .141 | .065 | .029\* | .015, .268 | .843 |  | .086 | .036 | .017\* | .015, .157 | .709 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 27.7% |  |  |  |  |  | 41.9% |  |  |  |  |  | 14.2% |  |  |  |  |  | 56.6% |  |  |
| *R2* (Outcome) |  |  | 40.5% |  |  |  |  |  | - |  |  |  |  |  | - |  |  |  |  |  | - |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b5/6/7/8) | .268 | .020 | <.001\* | .229, .308 | .329 |  | -.097 | .011 | <.001\* | -.119, -.076 | .-.130 |  | .115 | .019 | <.001\* | .078, .153 | .143 |  | -.061 | .012 | <.001\* | -.085, -.037 | -.078 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a5/6/7/8) | .428 | .038 | <.001\* | .353, .503 | .314 |  | .036 | .030 | .218 | -.022, .094 | .025 |  | .496 | .033 | <.001\* | .431, .561 | .360 |  | .073 | .023 | .002\* | .027, .119 | .051 |
| Self-Promotion 🡪 Outcome (c’2) | .025 | .021 | .220 | -.015, .066 | .023 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c2) | .190 | .033 | <.001\* | .125, .254 | .171 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a5/6/7/8 \* b5/6/7/8) | .115 | .010 | <.001\* | .095, .135 | .103 |  | -.004 | .003 | .240 | -.009, .002 | -.003 |  | .057 | .013 | <.001\* | .033, .082 | .052 |  | -.004 | .002 | .007\* | -.008, -.001 | -.004 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a9/10/11/12) | -.475 | .036 | <.001\* | -.546, -.405 | -.371 |  | .310 | .028 | <.001\* | .256, .364 | .221 |  | -.464 | .034 | <.001\* | -.531, -.397 | -.358 |  | .276 | .028 | <.001\* | .221, .330 | .207 |
| Family Defense 🡪 Outcome (c’3) | -.137 | .024 | <.001\* | -.184, -.090 | -.131 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c3) | -.365 | .032 | <.001\* | -.427, -.303 | -.350 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a9/10/11/12 \* b5/6/7/8) | -.127 | .011 | <.001\* | -.149, -.106 | -.122 |  | -.030 | .004 | <.001\* | -.038, -.022 | -.029 |  | -.054 | .012 | <.001\* | -.077, -.030 | -.051 |  | -.017 | .004 | <.001\* | -.025, -.009 | -.016 |
| Correlation/Covariance Mediators: (2) | -.045 | .039 | .246 | -.121, .031 | -.032 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .937 | .038 | <.001\* | .863, 1.011 | .741 |  | -.017 | .038 | .663 | -.091, .058 | -.012 |  | - | - | - | - |  |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .018 | .032 | .573 | -.044, .080 | .013 |  | .768 | .076 | <.001\* | .619, .916 | .520 |  | .094 | .040 | .019\* | .016, .171 | .070 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 9.1% |  |  |  |  |  | 5.6% |  |  |  |  |  | 9.7% |  |  |  |  |  | 5.9% |  |  |
| *R2* (Outcome) |  |  | 28.9% |  |  |  |  |  | - |  |  |  |  |  | - |  |  |  |  |  | - |  |  |

**Table S30**

Parameter Estimates for Simultaneous Mediator Models (Concerns about Apologizing and Failing to Apologize) Predicting Offered Apologies and Involving Perceived Normative Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative  Endorsement of Honor** | **Self-Image Concerns** | | | | | | | | | | |  | **Social-Image Concerns** | | | | | | | | | | |
| **Apologizing (1)** | | | | |  | **Failure to Apologize (2)** | | | | |  | **Apologizing (3)** | | | | |  | **Failure to Apologize (4)** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2/3/4) | -.511 | .163 | .002\* | -.829, -.192 | -.527 |  | -1.010 | .190 | <.001\* | -1.382, -.638 | -.647 |  | -.351 | .163 | .002\* | -.639., -.062 | -.377 |  | -1.295 | .186 | <.001\* | -1.660. -.930 | -.752 |
| Image Concerns 🡪 Outcome (b1/2/3/4) | -.047 | .042 | .268 | -.130., .036 | -.374 |  | .042 | .034 | .215 | -.025, .110 | .545 |  | -.147 | .048 | .002 | -.241, -.052 | -1.122 |  | .090 | .034 | .008\* | .023, .156 | 1.274 |
| Honor 🡪 Outcome (c'1) | .071 | .206 | .729 | -.332, .474 | .586 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c1) | -.013 | .219 | .954 | -.441, .416 | -.105 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a1/2/3/4 \* b1/2/3/4) | .024 | .022 | .275 | -.019, .067 | .197 |  | -.043 | .030 | .157 | -.102, .016 | -.353 |  | .051 | .029 | .072 | -.005, .107 | .423 |  | -.116 | .041 | .004\* | -.196, -.037 | -.958 |
| Correlation/Covariance Mediators: (2) | .072 | .024 | .002\* | .026, .118 | .593 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .077 | .021 | <.001\* | .035, .119 | .875 |  | .084 | .035 | .017\* | .015, .154 | .663 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .058 | .023 | .010\* | .014, .103 | .503 |  | .141 | .065 | .029\* | .015, .268 | .843 |  | .086 | .036 | .017\* | .015, .157 | .709 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 27.7% |  |  |  |  |  | 41.9% |  |  |  |  |  | 14.2% |  |  |  |  |  | 5.8% |  |  |
| *R2* (Outcome) |  |  | 1.0% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b5/6/7/8) | -.047 | .042 | .268 | -.130, .036 | -.210 |  | .042 | .034 | .215 | -.025, .110 | .204 |  | -.147 | .048 | .002 | -.241, -.052 | -.666 |  | .090 | .034 | .008\* | .023, .156 | .412 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a5/6/7/8) | .438 | .040 | <.001\* | .359, .516 | .320 |  | .036 | .029 | .215 | -.021, .093 | .025 |  | .502 | .035 | <.001\* | .433, .570 | .361 |  | .070 | .027 | .009\* | .017, .122 | .025 |
| Self-Promotion 🡪 Outcome (c’2) | -.013 | .052 | .806 | -.115, .089 | -.042 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c2) | -.099 | .055 | .070 | -.206, .008 | -.334 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a5/6/7/8 \* b5/6/7/8) | -.021 | .019 | .280 | -.058, .017 | -.067 |  | .002 | .002 | .371 | -.002, 005 | .005 |  | -.074 | .024 | .002\* | -.121, -.026 | -.240 |  | .006 | .004 | .075 | -.001, .013 | .010 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a9/10/11/12) | -.489 | .036 | <.001\* | -.560, -.418 | -.377 |  | .306 | .028 | <.001\* | .252, .361 | .219 |  | -.476 | .035 | <.001\* | -.545, -.407 | -.361 |  | .274 | .029 | <.001\* | .217, .331 | .206 |
| Family Defense 🡪 Outcome (c’3) | .002 | .060 | .976 | -.116, .119 | .006 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c3) | .132 | .059 | .025\* | .017, .248 | .455 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a9/10/11/12 \* b5/6/7/8) | .023 | .021 | .271 | -.018, 064 | .079 |  | .013 | .011 | .222 | -.008, .034 | .045 |  | .070 | .022 | .001\* | .027, .112 | .240 |  | .025 | .010 | .011\* | .006, .044 | .085 |
| Correlation/Covariance Mediators: (2) | -.039 | .040 | .326 | -.118, .039 | -.028 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .951 | .039 | <.001\* | .874, 1.029 | .742 |  | -.017 | .039 | .665 | -.093, 059 | -.012 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .027 | .033 | .416 | -.038, .091 | .020 |  | .748 | .068 | <.001\* | .614, .881 | .515 |  | .102 | .042 | .014\* | .021, .184 | .076 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 9.3% |  |  |  |  |  | 5.5% |  |  |  |  |  | 9.7% |  |  |  |  |  | 5.8% |  |  |
| *R2* (Outcome) |  |  | 2.1% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Table S31**

Parameter Estimates for Simultaneous Mediator Models (Concerns about Apologizing and Failing to Apologize) Predicting Reluctance to Apologize and Involving Personal Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative  Endorsement of Honor** | **Self-Image Concerns** | | | | | | | | | | |  | **Social-Image Concerns** | | | | | | | | | | |
| **Apologizing (1)** | | | | |  | **Failure to Apologize (2)** | | | | |  | **Apologizing (3)** | | | | |  | **Failure to Apologize (4)** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2/3/4) | -.331 | .133 | .013\* | -.592, -.070 | -.403 |  | -.809 | .161 | <.001\* | -1.124, -.493 | -.612 |  | -.270 | .125 | .031\* | -.515, -.025 | -.343 |  | -.993 | .156 | <.001\* | -1.300, -.686 | -.681 |
| Image Concerns 🡪 Outcome (b1/2/3/4) | .267 | .021 | <.001\* | .227, .307 | .612 |  | -.101 | .011 | <.001\* | -.123, -.079 | -.371 |  | .116 | .019 | <.001\* | .078, .154 | .255 |  | -.066 | .013 | <.001\* | -.092, -.040 | -.268 |
| Honor 🡪 Outcome (c'1) | .092 | .046 | .047\* | .001, .182 | .256 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c1) | .119 | .077 | .125 | -.033, .271 | .332 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a1/2/3/4 \* b1/2/3/4) | -.088 | .035 | .011\* | -.157, -.020 | -.246 |  | .081 | .018 | <.001\* | .047, .116 | .227 |  | -.031 | .016 | .049\* | -.063, .000 | -.087 |  | .066 | .017 | <.001\* | .033, .098 | .183 |
| Correlation/Covariance Mediators: (2) | .090 | .027 | .011\* | .036, .143 | .661 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .084 | .023 | <.001\* | .039, .128 | .871 |  | .090 | .037 | .015\* | .017, .163 | .676 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .084 | .030 | .005\* | .025, .143 | .602 |  | .165 | .072 | .022\* | .024, .163 | .853 |  | .096 | .040 | .017\* | .017, .174 | .702 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 16.2% |  |  |  |  |  | 37.4% |  |  |  |  |  | 11.8% |  |  |  |  |  | 42.7% |  |  |
| *R2* (Outcome) |  |  | 28.5% |  |  |  |  |  | - |  |  |  |  |  | - |  |  |  |  |  | - |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b5/6/7/8) | .267 | .021 | <.001\* | .227, .307 | .327 |  | -.101 | .011 | <.001\* | -.123, -.079 | -.135 |  | .116 | .019 | <.001\* | .078, .154 | .144 |  | -.066 | .013 | <.001\* | -.092, -.040 | -.084 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a5/6/7/8) | .672 | .048 | <.001\* | .577, 767 | .468 |  | -.160 | .032 | <.001\* | -.223, -.097 | -.102 |  | .639 | .048 | <.001\* | .545, .734 | .439 |  | -.062 | .032 | .053 | -.126, .001 | -.042 |
| Self-Promotion 🡪 Outcome (c’2) | .045 | .020 | .020\* | .007, .084 | .039 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c2) | .319 | .034 | <.001\* | .253, .385 | .272 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a5/6/7/8 \* b5/6/7/8) | .179 | .017 | <.001\* | .146, .213 | .153 |  | .016 | .003 | <.001\* | .009, .023 | .014 |  | .074 | .016 | <.001\* | .043, .105 | .063 |  | .004 | .002 | .068 | .000, .009 | .004 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a9/10/11/12) | -.447 | .033 | <.001\* | -.512, -.381 | -.368 |  | .317 | .027 | <.001\* | .264, .370 | .239 |  | -.390 | .035 | <.001\* | -.460, -.321 | -.317 |  | .276 | .024 | <.001\* | .229, .322 | .218 |
| Family Defense 🡪 Outcome (c’3) | -.106 | .018 | <.001\* | -.141, -.072 | -.107 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c3) | -.321 | .025 | <.001\* | -.370, -.272 | -.324 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a9/10/11/12 \* b5/6/7/8) | -.119 | .012 | <.001\* | -.144, -.095 | -.120 |  | -.032 | .004 | <.001\* | -.040, -.024 | -.032 |  | -.045 | .010 | <.001\* | -.065, -.026 | -.046 |  | -.018 | .004 | <.001\* | -.026, -.010 | -.018 |
| Correlation/Covariance Mediators: (2) | -.009 | .041 | .822 | -.089, .071 | -.007 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .834 | .033 | <.001\* | .770, .899 | .718 |  | .022 | .041 | .585 | -.057, .102 | .085 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .030 | .034 | .378 | -.037, .098 | .024 |  | .795 | .069 | <.001\* | .659, .930 | .529 |  | .111 | .043 | .009\* | .027, .195 | .085 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 18.1% |  |  |  |  |  | 4.3% |  |  |  |  |  | 15.3% |  |  |  |  |  | 4.0% |  |  |
| *R2* (Outcome) |  |  | 28.5% |  |  |  |  |  | - |  |  |  |  |  | - |  |  |  |  |  | - |  |  |

**Table S32**

Parameter Estimates for Simultaneous Mediator Models (Concerns about Apologizing and Failing to Apologize) Predicting Offered Apologies and Involving Personal Honor Endorsement

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Perceived Normative  Endorsement of Honor** | **Self-Image Concerns** | | | | | | | | | | |  | **Social-Image Concerns** | | | | | | | | | | |
| **Apologizing (1)** | | | | |  | **Failure to Apologize (2)** | | | | |  | **Apologizing (3)** | | | | |  | **Failure to Apologize (4)** | | | | |
| ***b*** | ***SE*** | ***p*** | ***95% CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |  | ***b*** | ***SE*** | ***p*** | ***95%CI*** | ***β*** |
| **Between-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Honor 🡪 Image Concerns (a1/2/3/4) | -.331 | .133 | .013\* | -.592, -.070 | -.403 |  | -.809 | .161 | <.001\* | -1.124, -.493 | -.612 |  | -.270 | .125 | .031\* | -.515, -.025 | -.343 |  | -.993 | .156 | <.001\* | -.1300, -.686 | -.681 |
| Image Concerns 🡪 Outcome (b1/2/3/4) | -.043 | .044 | .319 | -.129, .042 | -.257 |  | .041 | .035 | .245 | -.028, .109 | .388 |  | -.145 | .049 | .003\* | -.240, -.049 | -.823 |  | .088 | .035 | .011\* | .020, .156 | .929 |
| Honor 🡪 Outcome (c'1) | -.027 | .135 | .840 | -.292, .238 | -.197 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c1) | -.094 | .143 | .508 | -.374, .185 | -.681 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a1/2/3/4 \* b1/2/3/4) | .014 | .015 | .335 | -.015, .043 | .104 |  | -.033 | .025 | .194 | -.083, .017 | -.237 |  | .039 | .024 | .100 | -.008, .086 | .282 |  | -.088 | .031 | .005\* | -.149, -.026 | -.633 |
| Correlation/Covariance Mediators: (2) | .090 | .027 | .001\* | .036, .143 | .661 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .084 | .023 | <.001\* | .039, .128 | .871 |  | .090 | .037 | .015\* | .017, .163 | .676 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .084 | .030 | .005\* | .025, .143 | .602 |  | .165 | .072 | .022\* | .024, .305 | .853 |  | .096 | .040 | .017\* | .017, .174 | .702 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 16.2% |  |  |  |  |  | 37.4% |  |  |  |  |  | 11.8% |  |  |  |  |  | 46.3% |  |  |
| *R2* (Outcome) |  |  | 1.8% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Within-groups parameters** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Image Concerns 🡪 Outcome (b5/6/7/8) | -.043 | .044 | .319 | -.129, .042 | -.194 |  | .041 | .035 | .245 | -.028, .109 | .196 |  | -.145 | .049 | .003\* | -.240, -.049 | -.657 |  | .088 | .035 | .011\* | .020, .156 | .404 |
| *Self-Promotion & Retaliation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Promotion 🡪 Image Concerns (a5/6/7/8) | .691 | .050 | <.001\* | .592, .790 | .477 |  | -.152 | .033 | <.001\* | -.216, -0.087 | -.097 |  | .658 | .050 | <.001\* | .560, .756 | .447 |  | -.057 | .036 | .113 | -.128, .014 | -.039 |
| Self-Promotion 🡪 Outcome (c’2) | -.030 | .055 | .587 | -.138, .078 | -.092 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c2) | -.166 | .054 | .002\* | -.272, -.061 | -.513 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a5/6/7/8 \* b5/6/7/8) | -.030 | .031 | .328 | -.090, .030 | -.093 |  | -.006 | .006 | .268 | -.017, .005 | -.019 |  | -.095 | .031 | .002\* | -.155, -.035 | -.294 |  | -.005 | .003 | .131 | -.012, .001 | -.016 |
| *Defense of Family Reputation* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family Defense 🡪 Image Concerns (a9/10/11/12) | -.456 | .034 | <.001\* | -.523, -.389 | -.371 |  | .296 | .025 | <.001\* | .246, .345 | .224 |  | -.402 | .037 | <.001\* | -.474, -.329 | -.322 |  | .259 | .025 | <.001\* | .210, .307 | .205 |
| Family Defense 🡪 Outcome (c’3) | .009 | .050 | .857 | -.090, .108 | .033 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Total effect (c3) | .122 | .051 | .016 | .023, .221 | .443 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Indirect effect (a9/10/11/12 \* b5/6/7/8) | .020 | .020 | .329 | -.020, .059 | .072 |  | .012 | .010 | .237 | -.008, .032 | .044 |  | .058 | .018 | .001\* | .023, .093 | .212 |  | .023 | .009 | .015\* | .005, .041 | .083 |
| Correlation/Covariance Mediators: (2) | -.009 | .040 | .825 | -.087, .069 | -.007 |  | - | - | - | - | - |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (3) | .842 | .034 | <.001\* | .776, .909 | .718 |  | .018 | .040 | .663 | -.061, .096 | .013 |  | - | - | - | - | - |  | - | - | - | - | - |
| Correlation/Covariance Mediators: (4) | .035 | .034 | .307 | -.032, .101 | .027 |  | .780 | .065 | <.001\* | .653, .908 | .526 |  | .116 | .043 | .007\* | .032, .200 | .089 |  | - | - | - | - | - |
| *Modelled variance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *R2* (Mediator) |  |  | 18.6% |  |  |  |  |  | 3.7% |  |  |  |  |  | 15.8% |  |  |  |  |  | 3.6% |  |  |
| *R2* (Outcome) |  |  | 2.1% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |