As published in Journal of Social Psychology.

Is ostracism by a despised outgroup really hurtful? A replication and extension of Gonsalkorale and Williams (2007)

Marie-Pierre Fayant
University Paris Descartes and Univ. Grenoble Alpes

Dominique Muller
Univ. Grenoble Alpes and University Institute of France, France

Chris Hubertus Joseph Hartgerink
Tilburg University

Anthony Lantian
Univ. Grenoble Alpes

WORD COUNT: 2548
Abstract

Previous research has shown that being ostracized by members of a despised outgroup is as hurtful as being ostracized by ingroup members (Gonsalkorale & Williams, 2007). In the current study, we conduct a direct replication of the Gonsalkorale and Williams’s study and also investigate whether this (lack of) effect is due to the way negative consequences of ostracism were measured. To do so, we created a new measure that directly assesses whether people were hurt from being ostracized (or not). Our results and a small-scale meta-analysis including Gonsalkorale and Williams’s results show that ostracism effects are not significantly diminished when the source of ostracism is a despised outgroup. We discuss theoretical and methodological implications.

Keywords: Ostracism, Social Exclusion, Rejection, Despised Outgroup
Is ostracism by a despised outgroup really hurtful? A replication and extension of Gonsalkorale and Williams (2007)

Human beings are social animals who need others to survive. Consequently, social exclusion is especially hurtful. We could think, however, that exclusion by despised others should not be distressing. Still, Gonsalkorale and Williams (2007) showed that ostracism by a despised outgroup is as hurtful as ostracism by the ingroup. We replicated this study and investigated an alternative way to measure hurt feelings.

Ostracism refers to being ignored and excluded (Williams, 2007) and produces powerful negative consequences (e.g., Gerber & Wheeler, 2009). Ostracism is so powerful because it threatens several fundamental needs, such as the need for belongingness (Baumeister & Leary, 1995), self-esteem (Leary, Tambor, Terdal, & Downs, 1995), control, and meaningful existence (Williams & Sommer, 1997).

These negative reactions to ostracism seem to appear irrespective of the source of social exclusion: in previous studies, ostracism by ingroup members was not more threatening than ostracism by outgroup members (e.g., Williams, Cheung, & Choi, 2000). More intriguing, Gonsalkorale and Williams (2007) showed that the threat to fundamental needs was not (significantly) diminished when participants were ostracized by a despised outgroup: the Klu Klux Klan. Participants seemed to care about being ostracized even by someone they despise.

From an intergroup perspective, these results are surprising because social bonds are formed through group membership and the need to belong is supported by ingroup relationships (Baumeister & Leary, 1995). Moreover, outgroups elicit more avoidance tendencies and less affiliative behaviors than ingroup members (Paladino & Castelli, 2008; Word, Zanna, & Cooper, 1974). Because one rarely wants to deal with despised outgroups, it should be less threatening to be ostracized by despised outgroup than ingroup members.
Contrary to this intergroup perspective, a temporal perspective suggests a two-stage process (Williams, 2007). In the reflexive stage, ostracism would elicit a reflexive pain response regardless of the relevance of its source. Only during a later reflective stage, individuals would analyze this relevance (Williams, 2007). Accordingly, when measures capture such reflexive stage responses (like in Gonsalkorale & Williams, 2007), ostracism by ingroup or despised outgroups should be as threatening.

Failing to show weaker reactions to ostracism by a despised outgroup (Gonsalkorale & Williams, 2007) favors the temporal perspective. To assert such a conclusion, however, the Gonsalkorale and Williams’s study needs to be replicated. Indeed, this conclusion relies on a single study showing a null-effect that has never been replicated. Moreover, the measure used to assess the threat level could be problematic: participants reported, for instance, whether “(they) felt invisible” after ostracism or inclusion. A problem with such measures is that one can easily answer he felt invisible without being hurt: participants may have simply described what factually happened. They could answer they felt invisible because they were ignored, but their responses do not exactly tell us whether they found this experience truly hurtful. Accordingly, it is still possible that ostracism by a despised outgroup is less hurtful than by the ingroup.

To address these concerns, we replicated Gonsalkorale and Williams’s study, and we added a new measure assessing more directly whether people felt hurt. From an intergroup perspective, ostracism by despised outgroup members should be less hurtful than ostracism by ingroup members. This effect could theoretically appear on both measures, but it should be more likely to do so on the hurt feeling measure which that taps directly into what people felt. From a temporal perspective, people are expected to react the same way to ostracism regardless of its source, replicating Gonsalkorale and Williams’s on both measures. Finally, we performed a small-scale meta-analysis combining their study and ours.
**Method**

**Participants**

Sixty French undergraduates\(^1\) (42 women, \(M_{\text{age}} = 21.2, SD_{\text{age}} = 3.80\)) participated in a so-called visualization task in collective sessions (up to 8) to win an mp3 player. Participants were randomly assigned to a 2 (ostracism, inclusion) by 2 (despised outgroup, ingroup) between-participants design.

**Procedure**

The procedure of our study exactly replicates the Gonsalkorale and Williams’s procedure except that: a) instead of beginning the actual experiment with the political affiliation questionnaire, participants completed it several days before they came; b) we used French political parties (PS, UMP, and FN; see below); c) in the actual experiment, we included only the liked group (PS) and the despised outgroup (FN); d) after the classical measure of needs, we measured hurt feelings; and e) we did not include the feeling thermometer measure.

When signing-up, participants completed the political affiliation questionnaire (Gonsalkorale & Williams, 2007). First, they picked the political party they would affiliate to if they had to: the PS (*Parti Socialiste*, a left-wing party), the UMP (*Union pour le Mouvement Populaire*, a right-wing party), or the FN (*Front National*, a far-right party). Then, they assessed these parties (Table 1 indicates that participants perceived these parties similarly to the groups in Gonsalkorale & Williams’s study).

During the experiment, a first experimenter told participants they would play against two other participants located in another room. Then, a second experimenter left the room
allegedly to begin the game for some other participants. When he came back, participants started to play.

We used the Cyberball procedure (Williams et al., 2000), a virtual tossing game where participants had to mentally visualize themselves playing with two other (alleged) participants, who are actually controlled by the computer. Whenever participants received the ball, they clicked on the player they wanted to throw the ball to. In the ostracism condition, participants received two tosses at the beginning and were then totally excluded; in the inclusion condition, they received one third of the tosses (Williams et al., 2000). Supposedly in line with the political affiliation questionnaire, the two co-players were identified either by the PS (liked group) or by the FN (despised outgroup) flag.

After the game, participants completed the Gonsalkorale and Williams’s measures. First, as manipulation checks, participants indicated on a 5-point scale (1 = not at all to 5 = very much so) to what extent they were excluded and ignored during the game ($r = .92$) and estimated the percentage of throws they received. Second, participants relied on a 5-point scale (1 = strongly disagree to 5 = strongly agree) to answer the 12 items on fundamental needs ($\alpha = .91$). This scale assesses the need fulfillment for belonging ($\alpha = .94$, e.g., “I felt rejected”, reverse-scored item), self-esteem ($\alpha = .68$, e.g., “My self-esteem was high”), control ($\alpha = .69$, e.g., “I felt powerful”), and meaningful existence ($\alpha = .89$, e.g., “I felt invisible”, reverse-scored item).

After responding to Gonsalkorale and Williams’s original questions, participants completed our measure of hurt feelings. To do so, for each of the previous questions, we reminded participants of their answer (e.g., “to the question ‘During the game, I felt rejected’ you answered 5”) and asked them how this feeling was on a 7-point scale ($\alpha = .89$) from “really hurtful” (-3) to “really pleasant” (3).
We then measured mood with three items on a 7-point scale (good-bad, happy-sad, relaxed-tense; $\alpha = .76$). Finally, participants recalled the political affiliation of their co-players. Participants were then debriefed.

**Results**

We excluded nine participants: one for guessing the hypothesis, three for incorrectly reporting the political party of their co-players, four because of their political orientation (FN or UMP), and one because her standardized deleted residual was extreme (3.96; McClelland, 2000). We conducted 2 x 2 ANOVAs on the different scores. Below we also report 95% confident intervals corresponding to differences between the tested means.

**Manipulation checks.** Ostracized participants felt more excluded and ignored ($M = 4.58, SD = 0.46$) during the game than included participants ($M = 2.04, SD = 0.78$), $F(1, 47) = 196.68, p < .001, 95\% CI [-2.91, -2.18], \eta_p^2 = .81$. Ostracized participants also reported having received less throws ($M = 8.48, SD = 6.34$) than included participants ($M = 33.92, SD = 7.50$), $F(1, 46)^2 = 180.19, p < .001, [21.73, 29.40], \eta_p^2 = .80$. Other effects were not significant, $ps > .10$.

**Fundamental needs.** We averaged the need fulfillment for belonging, control, self-esteem, and meaningful existence. Fundamental need fulfillment was lower in the ostracism condition ($M = 2.14, SD = 0.54$) than in the inclusion condition ($M = 3.53, SD = 0.58$), $F(1, 47) = 82.30, p < .001, [1.10, 1.72], \eta_p^2 = .64$. Replicating Gonsalkorale and Williams (2007), co-players' membership did not significantly moderate this effect, $F(1, 47) = 2.50, p = .121, [-1.11, 0.13], \eta_p^2 = .05$. Moreover, this moderation is descriptively in the opposite direction to what should be expected. The co-players' membership main effect was also not significant, $F(1, 47) < 1$. Except for the need to belong, the analysis per need reveals the same pattern, namely ostracism main effects, but neither co-players' membership main effects, nor
Ostracism by co-players' membership interactions (see Table 2). Regarding the need to belong, contrary to the intergroup perspective, the interaction indicates that ostracism affects participants more when ostracized by a despised outgroup ($M_{ostracism} = 1.5$, $SD_{ostracism} = 0.52$ and $M_{inclusion} = 4.25$, $SD_{inclusion} = 0.78$) than by ingroup members ($M_{ostracism} = 2.33$, $SD_{ostracism} = 0.72$ and $M_{inclusion} = 4.10$, $SD_{inclusion} = 1.03$), $F(1, 47) = 4.93$, $p = .031$, $[-1.87, -0.09]$, $\eta_p^2 = .095$. 

**Hurt feelings.** Consistent with the results for fundamental needs, ostracized participants reported being hurt more ($M = -0.57$, $SD = 0.63$; negative indicating hurt feelings) than included participants ($M = 0.41$, $SD = 0.69$), $F(1, 47) = 29.251$, $p < .001$, $[0.63, 1.37]$, $\eta_p^2 = .384$. Co-players' membership marginally moderated this effect, but contrary to the intergroup perspective, this interaction indicated that ostracism affected participants more when they were ostracized by despised outgroup members ($M_{ostracism} = -0.72$, $SD_{ostracism} = 0.77$; $M_{inclusion} = 0.59$, $SD_{inclusion} = 0.50$) than ingroup members ($M_{ostracism} = -0.44$, $SD_{ostracism} = 0.49$ and $M_{inclusion} = 0.24$, $SD_{inclusion} = 0.81$), $F(1, 47) = 2.88$, $p = .097$, $[-1.37, 0.12]$, $\eta_p^2 = .058$. Again, co-players' membership was not significant, $F(1, 47) < 1$.

**Mood.** In line with the previous results, ostracized participants reported less positive mood ($M = 4.51$, $SD = 1.22$) than included ones ($M = 5.28$, $SD = 0.88$), $F(1, 47) = 6.36$, $p = .015$, $[0.15, 1.37]$, $\eta_p^2 = .119$. Neither the co-players' membership main effect, nor the co-players' membership by ostracism interaction were significant, both $Fs(1, 47) < 1$.

**Meta-analysis**

As we report a non-significant ostracism by group interaction, we combined the Gonsalkore and Williams’s study and ours into a small-scale meta-analysis (Cumming, 2012) to test the same interaction with more statistical power. We did so for the composite need measure and each fundamental need separately.
As an effect size for the interaction effect, we computed a standardized mean difference. The raw interaction effect was computed as \[\frac{(X_{11} - \bar{X}_{12}) - (X_{21} - \bar{X}_{22})}{s_p}\] (the nominator being the difference in simple effects and \(s_p\) the pooled standard deviation) and was subsequently corrected for sample size to result in Hedges' g (Borenstein, 2009, for exact formulae). We subsequently estimated the average effect across these two studies with a weighted\(^4\), random-effects\(^5\) model (Cumming, 2012). No interaction was reliable (Table 3). In sum, this meta-analysis yields the same basic conclusions as the separate studies.

**Discussion**

We tested whether ostracism by a despised outgroup is less hurtful than ostracism by the ingroup. We replicated Gonsalkorale and Williams (2007) by manipulating ostracism and the source of ostracism (despised outgroup vs. ingroup). We also added a new measure that more directly assessed whether people felt hurt. Results showed that not only does ostracism decrease need fulfillment, but also that participants reported feeling more hurt in that condition. Importantly, a despised outgroup did not diminish these effects. These (null) effects confirm Gonsalkorale and Williams’s results and favor the temporal perspective over the intergroup one.

In this paper, we observed that the reaction to being ostracized by despised outgroup members is not reliably less hurtful than being ostracized by ingroup members. Participants tend to report more negative feelings after ostracism by despised outgroup members; yet this effect is significant only on the need to belong measure and is marginal on hurt feelings. Note that the marginal effect on hurt feelings is driven by a specific unexpected effect in the opposite direction on the hurt from control measure. Because these effects were not theoretically predicted and the meta-analysis does not confirm this trend for the need to belong measure, it is not further discussed.
Our new measure aimed to tap directly into the feeling component of ostracism rather than its factual component. This measure, however, gave similar results. One limitation with this measure could be that participants may have aimed for consistency with their previous responses; and indeed these responses were correlated \((rs > .29; ps < .05)\). In the context of this study, there is no way to determine whether this is due to consistency or whether it shows that the measure of need fulfillment successfully assesses how people feel. One way to resolve this question could be to use a more implicit measure of participants’ feelings.

Overall, these results suggest that the reaction to ostracism is so strong that even a despised outgroup only weakly moderates its effect, if at all. Although our data favor the temporal over the intergroup perspective, further research is needed to conclude that response to ostracism is reflexive. Our study provides evidence that the ostracism response is not dependent on the source of ostracism, but it does not ensure that this response is purely reflexive.

To further test the temporal perspective future work should directly test correction processes implied at the reflective stage. Investigating the time-course of the ostracism response would enable us to test whether the ostracism response to a despised outgroup decreases over time, providing evidence for a correction process. Another way of studying correction processes would be to investigate the sensibility of ostracism response to cognitive resources. While the reflexive response should be insensitive to cognitive resources, this should not be the case for the reflective response because correction processes need cognitive resources (Gilbert, Giesler, & Morris, 1995). According to the temporal perspective, cognitive load should impede the appearance of correction processes. While the ostracism response to a despised outgroup should decrease over time, this should be less true under cognitive load.
Although future work should explore these issues, this experiment replicates the (null) effect of Gonsalkorale and Williams (2007) in a new population, with a new despised outgroup. Moreover, our small-scale meta-analysis still found no traces of a reliable moderation by a despised outgroup. Our work hence strengthens the evidences that (initial) response to ostracism would be insensitive to correction processes. Ostracism seems so powerful that even ostracism by people one despises makes people feel hurt.
References


Footnotes

1 The meta-analysis presented below corrects the power issue raised by this sample-size, which might seem too low to accept a possible null effect.

2 Including these participants does not change the statistical conclusions, except that the ostracism by co-players' membership interaction for the need to belong and the hurt measure becomes non-significant, $F < 1$.

3 The degrees of freedom are only 46 because of a missing value.

4 The meta-analysis weights the contribution of each study based on the variance of the effect size: the contribution is stronger when the variance is low (Cumming, 2012).

5 While fixed-effect models assume that all the studies estimate the same effect-size, random-effect models assume that the studies can estimate different effect-sizes. Cumming (2012) recommends using random-effect models.
Table 1

*Means and standard deviations of perceptions of the FN, UMP and PS political party*

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Despised outgroup (FN)</td>
<td>Rival outgroup (UMP)</td>
<td>Ingroup (PS)</td>
</tr>
<tr>
<td>I agree with and share the same beliefs as this group</td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td></td>
<td>1.19 (0.51)^a</td>
<td>1.93 (0.81)^b</td>
<td>3.60 (0.69)^c</td>
</tr>
<tr>
<td>I respect this group, even if I may not agree with it</td>
<td>2.14 (1.34)^a</td>
<td>3.31 (1.20)^b</td>
<td>3.88 (1.10)^c</td>
</tr>
<tr>
<td>This group disgusts me</td>
<td>4.29 (0.99)^a</td>
<td>2.83 (1.08)^b</td>
<td>1.77 (0.84)^c</td>
</tr>
<tr>
<td>The world would be a better place if this group did not exist</td>
<td>3.98 (1.05)^a</td>
<td>2.83 (1.12)^b</td>
<td>1.86 (0.99)^c</td>
</tr>
</tbody>
</table>

Different subscripts on a same row mean that scores significantly differ at $p < .05$. 
Table 2
Means and standard-deviations as a function of Ostracism and Co-players’ membership

<table>
<thead>
<tr>
<th>Variables</th>
<th>Despised outgroup (n = 12)</th>
<th>Ingroup (n = 14)</th>
<th>Inclusion (n = 12)</th>
<th>Inclusion (n = 13)</th>
<th>Effect sizes (ƞ²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fundamental needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M (SD)</td>
<td>1.98 (0.55)</td>
<td>3.36 (0.56)</td>
<td>2.28 (0.50)</td>
<td>3.44 (0.60)</td>
<td>.636***</td>
</tr>
<tr>
<td>Belonging</td>
<td>1.50 (0.52)</td>
<td>4.25 (0.78)</td>
<td>2.33 (0.72)</td>
<td>4.10 (1.03)</td>
<td>.69***</td>
</tr>
<tr>
<td>Control</td>
<td>1.81 (0.63)</td>
<td>2.97 (0.97)</td>
<td>1.74 (0.56)</td>
<td>2.51 (0.77)</td>
<td>.318***</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>2.25 (0.64)</td>
<td>3.00 (0.79)</td>
<td>2.17 (0.68)</td>
<td>2.95 (0.66)</td>
<td>.248***</td>
</tr>
<tr>
<td>Meaningful existence</td>
<td>2.36 (1.04)</td>
<td>4.31 (0.70)</td>
<td>2.88 (1.09)</td>
<td>4.21 (0.76)</td>
<td>.46***</td>
</tr>
<tr>
<td>Hurt from unfulfilled fundamental needs</td>
<td>-0.72 (0.77)</td>
<td>0.59 (0.50)</td>
<td>-0.44 (0.49)</td>
<td>0.24 (0.81)</td>
<td>.384***</td>
</tr>
<tr>
<td>Hurt from belonging</td>
<td>-0.44 (1.64)</td>
<td>0.25 (0.79)</td>
<td>-0.5 (0.71)</td>
<td>0.08 (0.86)</td>
<td>.09*</td>
</tr>
<tr>
<td>Hurt from control</td>
<td>-0.86 (1.05)</td>
<td>0.75 (0.90)</td>
<td>-0.23 (0.47)</td>
<td>0.31 (0.97)</td>
<td>.294***</td>
</tr>
<tr>
<td>Hurt from Self-esteem</td>
<td>-0.28 (0.90)</td>
<td>1.06 (0.71)</td>
<td>-0.10 (0.66)</td>
<td>0.49 (1.15)</td>
<td>.245***</td>
</tr>
<tr>
<td>Hurt from Meaningful existence</td>
<td>-1.31 (1.95)</td>
<td>0.28 (0.76)</td>
<td>-0.95 (0.66)</td>
<td>0.08 (0.93)</td>
<td>.342***</td>
</tr>
<tr>
<td>Mood</td>
<td>4.44 (1.47)</td>
<td>5.06 (0.97)</td>
<td>4.57 (1.02)</td>
<td>5.49 (0.77)</td>
<td>.119*</td>
</tr>
<tr>
<td>Manipulation checks</td>
<td>4.67 (0.39)</td>
<td>2.04 (0.75)</td>
<td>4.50 (0.52)</td>
<td>2.04 (0.83)</td>
<td>.807***</td>
</tr>
<tr>
<td>% Throws</td>
<td>8.33 (7.41)</td>
<td>37.08 (6.20)</td>
<td>8.61 (5.47)</td>
<td>31.00 (7.62)</td>
<td>.797***</td>
</tr>
</tbody>
</table>

*aEach fundamental needs fulfillment score is composed of three 5-point scale items (from 1 = strongly disagree to 5 = strongly agree). The need for belonging fulfillment and the need for a meaningful existence fulfillment are reverse-coded. The fundamental needs fulfillment score is computed as an average of these scores.

*bThe mood score is an average of three 7-point scale items and a higher score reflects more positive evaluations.

*cThe hurt feelings measure is composed of 12 items on a 7-point scale (from -3 = really hurtful to 3 = really pleasant). Higher scores reflect less suffering.

*dWe averaged the two 5-point scale manipulation check items (1 = not at all to 5 = very much so).

*** p < 0.001, ** p < 0.01, * p < 0.05, † p < .10.
Table 3

Meta-analytic test of the Ostracism and Co-players’ membership interaction (for the composite variable as well as the different need separately) when combining Gonsalkorale and Williams’ (2007) study and the current study.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Q-statistic (df = 1)</th>
<th>Estimated average interaction</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>2.1267</td>
<td>0.3056</td>
<td>-0.8150; 1.4262</td>
</tr>
<tr>
<td>Belonging</td>
<td>4.2912</td>
<td>0.4191</td>
<td>-1.1084; 1.9466</td>
</tr>
<tr>
<td>Control</td>
<td>1.685</td>
<td>0.0198</td>
<td>-0.9667; 1.0063</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>0.5250</td>
<td>0.2359</td>
<td>-0.5048; 0.9765</td>
</tr>
<tr>
<td>Meaningful existence</td>
<td>1.5410</td>
<td>0.1862</td>
<td>-0.7686; 1.1411</td>
</tr>
</tbody>
</table>