

Summary

The Effects Of Partial Exclusion On Fundamental Needs And Affect Among Gay Men

Çağla Kasapoğlu¹

İbrahim Mert Teközel²

Social exclusion, defined as the individual being left out of a group, is a situation that threatens basic psychological needs and has been theoretically framed within Williams's (2007) need-threat model. According to the model, exclusion threatens four fundamental needs: belonging, self-esteem, meaningful existence, and control.

Although the idea that the effects of exclusion on an individual may vary depending on the social identity of the excluders is noteworthy, it has been discussed only limitedly in the literature. Bernstein and colleagues (2010) criticized studies that found no differences in responses to exclusion by ingroup or outgroup members, arguing that participants often based their responses on nonessential group identities (e.g., smoking status). Bernstein et al. (2010) demonstrated that acceptance by a group perceived as more essential to the individual is evaluated more positively than acceptance by groups considered relatively insignificant. Their study also found that exclusion by members of one's own ethnic group increases the pain of social exclusion while social inclusion by the same group enhances positive effects.

Replicating experiences of exclusion and inclusion in real life within a laboratory setting has been possible using partial ostracism paradigms, where exclusion and inclusion exist simultaneously. Most studies examining the effects of social support during partial exclusion have used female samples, and support was typically provided as accompaniment rather than active inclusion (e.g., Morese et al., 2019; Ruggiero et al., 1997). In summary, although a general consensus exists on the protective role of social support, most acute partial exclusion experiments either lacked an actively inclusive person or did not consider genuinely disadvantaged identities.

To address these gaps, we examined whether the psychological impact of acute social exclusion varies

with the supporter's group membership in a highly stigmatized population: self-identified gay men in Turkey (Göçmen & Yılmaz, 2017; Öztürk, 2011). The aim was to examine whether ingroup support provides a protective buffer during partial exclusion and whether exclusion by ingroup members is more damaging than exclusion by outgroup members.

To achieve this aim, participants experienced one of three interaction patterns (partial exclusion, exclusion, or inclusion) by gay (ingroup) or heterosexual (outgroup) virtual players in Cyberball paradigm. Outcomes are the four fundamental psychological needs and affect. The study's hypotheses are as follows:

Hypothesis 1. Participants partially excluded by ingroup avatars will show no significant differences in belonging (H1a), self-esteem (H1b), meaningful existence (H1c), control (H1d), positive affect (H1e), and negative affect (H1f) compared to participants included by ingroup avatars. However, they are expected to differ significantly from participants in the full exclusion condition on these measures.

Hypothesis 2. When interacting with outgroup members, the protective pattern predicted for the ingroup is not expected. Partially excluded participants by outgroup avatars will differ significantly from included participants on belonging (H2a), self-esteem (H2b), meaningful existence (H2c), control (H2d), positive affect (H2e), and negative affect (H2f), but results are expected to resemble full exclusion participants.

Hypothesis 3. In the full exclusion condition, participants excluded by ingroup avatars will report lower belonging (H3a), self-esteem (H3b), meaningful existence (H3c), and control (H3d), lower positive affect (H3e), and higher negative affect (H3f) than participants excluded by outgroup avatars.

Hypothesis 4. Participants included by ingroup

avatars will report higher belonging (H4a), self-esteem (H4b), meaningful existence (H4c), and control (H4d), higher positive affect (H4e), and lower negative affect (H4f) than participants included by outgroup avatars.

Method

Sample and Data Collection Tools

The sample consisted of 120 self-identified gay men recruited in Turkey, with a mean age of 24.7 years ($SD = 3.8$, range = 18-42). Participants were recruited through online LGBTQ+ forums and snowball sampling. All participants provided informed consent, and the study received ethical approval from Ege University's institutional review board. Data were collected using the Need-Threat Scale (Van Beest & Williams, 2006; Turkish adaptation by Aydın et al., 2013) to assess belonging, self-esteem, meaningful existence, and control, and the Cyberball Affect Scale (Yavuz et al., 2008 adaptation) to measure positive and negative affect. Manipulation checks asked participants to estimate the percentage of throws they received and to evaluate the plausibility of the game.

Procedure

A 3 (inclusion condition: full exclusion, partial exclusion, inclusion) $\times$ 2 (group membership: ingroup vs. outgroup) between-subjects factorial design was employed. Participants played a version of Cyberball in which two avatars represented either gay men (ingroup) or heterosexual men (outgroup).

- Inclusion condition: Ball tosses are approximately equally distributed among all three players.
- Partial exclusion condition: Participants received the ball in about 33% of throws, with one avatar occasionally tossing to them while the other consistently ignored them.
- Full exclusion condition: Participants received only two initial passes and were subsequently ignored for the remainder of the game.

After Cyberball, participants completed questionnaires assessing manipulation checks, psychological needs, and affective states.

Statistical Analyses

Data were analyzed using MANOVA to test overall effects, followed by ANOVAs and Games-Howell post hoc tests when assumptions were violated. IBM SPSS 20 statistical software was used for all analyses.

Results

Manipulation Checks

A two-way ANOVA to the estimated pass percentages to evaluate the effectiveness of the psychological exclusion manipulation indicated a statistically significant main effect of the participation condition, $F(2,114) = 63.36$, $p < .001$, $\eta^2 = .53$. The main effect of the avatar group membership was not significant, $F(1,114) = 2.24$, $p = .137$, $\eta^2 = .02$. The interaction effect between the participation condition and the avatar group membership was significant, $F(2,114) = 3.30$, $p = .04$, $\eta^2 = .06$. Because Levene's test indicated unequal variances ($F = 14.87$, $p < .001$), Games-Howell tests were used for pairwise comparisons. Participants clearly distinguished between conditions, reporting significantly higher percentages of throws in the inclusion condition ($M = 48.65$, $SD = 20.51$) than in the partial exclusion ($M = 22.95$, $SD = 18.30$) or full exclusion ($M = 8.65$, $SD = 7.82$) conditions. Games-Howell tests confirmed these large differences ($d = -1.32$ and $d = 1.02$, respectively).

To examine the interaction between participation condition and avatar group membership, group differences were assessed at each level of inclusion. A significant difference emerged only in the inclusion condition: participants playing with ingroup avatars estimated receiving a higher proportion of throws ($M = 55.50$, $SD = 20.45$) than those playing with outgroup avatars ($M = 41.80$, $SD = 18.61$), $t(38) = 2.22$, $p = .03$, $d = .70$. This suggests that inclusion by ingroup avatars elicits a stronger sense of belonging than inclusion by outgroup avatars. No differences were observed in the other conditions (all $p > .05$).

The success of the manipulation was further evaluated in the partial exclusion condition, where participants were asked to estimate the percentage of throws received from each avatar. Participants reported significantly higher percentages of throws from the including avatar ($M = 37.18$, $SD = 22.60$) than from the excluding avatar ($M = 11.38$, $SD = 14.35$), $t(39) = 6.40$, $p < .001$, $d = 1.36$, indicating that the experimental manipulation was effective.

Effects on Fundamental Psychological Needs

Analysis of psychological needs using MANOVA revealed a significant main effect of inclusion condition, Pillai's Trace = .77, $F(8, 224) = 17.72$, $p < .001$, $\eta^2 = .39$, but no significant main effect of avatar group membership, Pillai's Trace = .05, $F(4, 111) = 1.56$, $p = .19$, $\eta^2 = .05$. The interaction between inclusion condition and group membership was significant, Pillai's Trace = .38, $F(8, 224) = 6.66$, $p < .001$, $\eta^2 = .19$.

Univariate ANOVAs indicated that inclusion condition significantly affected belonging, $F(2, 114) = 141.48, p < .001, \eta^2 = .71$; self-esteem, $F(2, 114) = 74.75, p < .001, \eta^2 = .57$; meaningful existence, $F(2, 114) = 82.12, p < .001, \eta^2 = .59$; and control, $F(2, 114) = 102.10, p < .001, \eta^2 = .64$. Post hoc Bonferroni comparisons showed that partial exclusion yielded higher need satisfaction than full exclusion but lower than inclusion across all needs (all $p < .05$).

Simple effects analyses were conducted to explore the significant interaction (Kirk, 2012): For belonging, in the ingroup context, partial exclusion led to significantly lower belonging than inclusion, $p = .02$, but significantly higher than full exclusion, $p < .001$. In the outgroup context, the same pattern was observed, all $p < .001$. For self-esteem, in the ingroup context, no significant difference emerged between partial exclusion and inclusion, $p > .05$, whereas partial exclusion was higher than full exclusion, $p < .001$. In the outgroup context, partial exclusion resulted in lower self-esteem than inclusion, $p < .001$, with no difference compared to full exclusion, $p > .05$. Regarding meaningful existence, ingroup partial exclusion did not differ from inclusion, $p > .05$, but was higher than full exclusion, $p < .001$. Outgroup partial exclusion was lower than inclusion, $p = .004$, but higher than full exclusion, $p < .001$. Finally, for control, ingroup partial exclusion did not differ from inclusion, $p > .05$, but was higher than full exclusion, $p < .001$. Outgroup partial exclusion was lower than inclusion, $p < .001$, but higher than full exclusion, $p = .009$.

In summary, within the ingroup context, partial exclusion did not differ from inclusion for self-esteem, meaningful existence, and control, but both conditions produced higher need satisfaction compared to full exclusion. These results indicate a protective effect of partial exclusion by ingroup members, i.e., social support, supporting H1b, H1c, and H1d. Regarding outgroup partial exclusion, only H2b (self-esteem) was supported, indicating no protective effect from outgroup members.

For the third and fourth hypothesis groups, only H3b was supported: full exclusion by ingroup members was more detrimental to self-esteem than full exclusion by outgroup members ($p = .008$), whereas no differences emerged for other needs. Inclusion by ingroup versus outgroup members did not produce significant differences across any psychological need, failing to support H4 hypotheses.

Effects on Affect

Analysis of affect using MANOVA revealed a significant main effect of inclusion condition, Pillai's Trace = .58, $F(4, 228) = 23.18, p < .001, \eta^2 = .29$, no signif-

icant main effect of avatar group membership, Pillai's Trace = .008, $F(2, 113) = .44, p = .64, \eta^2 = .008$, and a significant interaction, Pillai's Trace = .13, $F(4, 228) = 4.05, p = .003, \eta^2 = .07$.

Univariate ANOVAs for positive affect, $F(2, 114) = 41.90, p < .001, \eta^2 = .42$, and negative affect, $F(2, 114) = 91.51, p < .001, \eta^2 = .39$, indicated significant effects of inclusion condition. Simple effects analyses showed: For positive affect, ingroup partial exclusion did not differ from inclusion, $p > .05$, but was higher than full exclusion, $p < .001$. Outgroup partial exclusion was lower than inclusion, $p < .001$, and similar to full exclusion, $p > .05$. For negative affect, ingroup partial exclusion did not differ from inclusion, $p > .05$, but was lower than full exclusion, $p < .001$. Outgroup partial exclusion was higher than inclusion, $p < .001$, and similar to full exclusion, $p > .05$.

These results indicate that social support from ingroup members buffered the negative effects of partial exclusion on positive and negative affect, supporting H1e and H1f, whereas this pattern was absent for outgroup members, supporting H2e and H2f. Among the third and fourth hypothesis groups, only H3f was supported, showing greater negative affect when excluded by ingroup members compared to outgroup members, $p = .04$.

In summary, the supported hypotheses in this study were H1b, H1c, H1d, H1e, H1f, H2b, H2e, H2f, and H3f.

Discussion

This study experimentally examined the effects of experiences with ingroup or outgroup members in three types of social interactions (partial exclusion, full exclusion, inclusion) for gay men. Findings indicate that social support from ingroup members during partial exclusion protects against negative outcomes in some psychological needs (self-esteem, meaningful existence, and control) and affect (positive and negative). In contrast, support from outgroup members did not confer the same protection; need satisfaction in self-esteem and affect was as low as if participants had been excluded by both avatars.

Additionally, full exclusion by ingroup members produced more negative effects on self-esteem and negative affect than exclusion by outgroup members. No significant differences emerged between inclusion by ingroup and outgroup members.

Taken together, these results highlight the importance of the source of social support during partial exclusion. Previous studies using partial exclusion paradigms often neglected group membership or failed to clarify

mechanisms explaining the effect of social support (e.g., Sandstrom et al., 2017; Williams et al., 2000). Essentialism theory (Bernstein et al., 2010) emphasizes the effectiveness of inclusion by members of groups that are important to the individual. Combining our finding of a protective effect from ingroup support with essentialism suggests that, when a group membership such as sexual orientation significantly impacts an individual's life, people may focus more on ingroup members' behaviors than outgroup members' as sources of social support.

A notable finding in our study was the lack of support for the expectation that inclusion by ingroup members would be more satisfying than inclusion by outgroup members. This aligns with Allport's (1954) intergroup contact hypothesis, which proposes that intergroup contact can reduce prejudice. Gay individuals' continual and obligatory interaction with outgroup members (heterosexuals) may elevate the satisfaction of inclusion by outgroup members to levels comparable to ingroup inclusion. Unlike racial minorities, gay individuals routinely interact with outgroup members in family, professional, and social contexts, whereas racial minorities may live in segregation with limited intergroup contact. This difference may affect the relative importance of outgroup acceptance for sexual minorities versus other minorities. Consequently, findings based solely on racial minority participants may not generalize to sexual minorities.

Although no ingroup-outgroup effect was observed in inclusion, the observed differences in full exclusion (for self-esteem and negative affect) are noteworthy. While some previous findings are consistent (e.g., Mendes et al., 2008; Williams & Sommer, 1997), the absence of group differences for most variables may indicate that, for gay men, outgroup influence on the satisfaction of certain needs is stronger, even in inclusion conditions. Yang et al. (2017) found that exclusion by ingroup versus outgroup members threatens different needs, relational needs versus competence, respectively, supporting this interpretation. In disadvantaged groups, the psychological impact of support or exclusion may vary depending on the group providing it.

The main rationale of this study was to address the lack of literature examining reactions of disadvantaged groups during partial exclusion and the factors shaping these responses. Strengths of the study include focusing on an essential group membership (sexual orientation) and using an effective experimental paradigm.