Supplementary Material

**Processing of Ambiguous Facial Affect in Adolescents with Depressive Symptoms Prior to and Following Social Exclusion: The Role of Perceptual Sensitivity and Response Bias**

# Manipulation check: Cyberball

## Mood ratings

To investigate the effects of the Cyberball experience on the participants’ mood, a 4 (time: baseline, post-inclusion, post-exclusion and post-experimental assessment) x 2 (group: HD vs. LD) repeated-measures ANOVA was conducted. The results indicated a main effect of time (*F*(3, 174) = 3.60, *p* < .05, *η2*=.06, 90% CI [.01, .11]) and group (*F*(1, 58) = 5.60, *p* < .05, *η2*=.08, 90% CI [.01, .21]), with HD group scoring lower mood ratings at every assessment point. The general quadratic (*F*(1, 58) = 4.65, *p* < .05, *η2*=.08, 90% CI [.0, .2]) and linear (*F*(1, 58) = 4.04, *p* < .05, *η2*=.07, 90% CI [.0, .18]) trends indicated that the main effect of time is due to an overall tendency for decreasing mood ratings across the assessment points, with a peak of mood ratings following the inclusion experience.

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*Supplementary Fig. 1* Mean rating scores for mood over four assessments for HD and LD group. Assessment 1 = baseline; assessment 2 = post-inclusion; assessment 3 = post-exclusion; assessment 4 = final assessment after the experimental task. HD = high depressive symptoms; LD = low depressive symptoms

## Model ratings

The next analysis was conducted to explore how the cyber-ostracism manipulation impacted the subjective ratings for the includer, excluder and stranger model pairs. For this purpose, mean scores were computed from the dimensional fairness and sympathy scores obtained for condition. The scores were then entered in a 3 (condition: includers, excluders, strangers) x 3 (time: baseline, post-Cyberball and post-experimental assessment) x 2 (group: HD vs. LD) repeated-measures ANOVA. The results yielded a main effect of condition (*F*(2, 116) = 20.39, *p* < .001, *η2*=.16, 90% CI [.15, .35]) and time (*F*(2, 116) = 9.37, *p* < .001, *η2*=.14, 90% CI [.05, .23]), which were further qualified by a condition x time (*F*(4, 232) = 7.53, *p* < .001, *η2*=.11, 90% CI [.05, .17]) and a three-way condition x time x group interaction (*F*(4, 232) =3.10, *p* < .05, *η2*=.05, 90% CI [.01, .09]). To investigate the interaction effect, 3 separate analyses were conducted for each assessment time. At baseline, a condition by group interaction emerged (*F*(2, 116) = 5.05, *p* < .01, *η2*=.08, 90% CI [.01, .16]; all other *p*s > .05); however, post-hoc paired-samples t-tests for each condition did not reveal any significant differences between groups (all *p*s > .05). For the assessment point following the Cyberball-game, there was a main effect of condition (*F*(2, 116) = 15.08, *p* < .01, *η2*=.20, 90% CI [.1, .3]) and a trend toward a condition x group interaction (*F*(2, 116) = 2.67, *p* < .1, *η2*=.04, 90% CI [.0, .11]). The condition effect was due to lower mean ratings for excluder than for includer and stranger models (*p* < .01) as well as the interaction trend toward even lower ratings for excluding models in the HD group.

The results for the final assessment point at the end of the experimental task, indicated a main effect of condition (*F*(2, 116) = 4.71, *p* < .05, *η2*=.08, 90% CI [.01, .15]; all other *p*s > .05), which was due to lower subjective ratings for excluder than for includer and stranger models (*p* < .05).



*Supplementary Fig. 2* Mean rating scores obtained for includer, excluder and stranger models for LD and HD groups across different assessment points: A) Baseline assessment B) Following the Cyberball-game C) After completion of the experimental task. HD = high depressive symptoms; LD = low depressive symptoms