Supplementary Materials

Random Intercept-Cross Lagged Panel Model (RI-CLPM) Results

Post-hoc, a random intercept cross lagged panel was also tested (RI-CLPM; Hamaker, Kuiper, & Grasman, 2015). Researchers who have critiqued the cross-lagged panel model (CLPM) have stated that it does not adequately account for stable individual level differences in behavior by failing to parse apart between and within level individual differences (Hamaker, Kuiper, & Grasman, 2015). The main purpose of a RI-CLPM is to examine how two variables influence one another overtime while controlling for stable individual differences (Hamaker et al., 2015). The goal of the current study is not to examine cross lagged associations between variables over time, but to determine how internalizing problems at T1 predict change in relational and physical victimization over time (i.e., there are not cross lagged paths between internalizing problems and victimization over time). Nonetheless, the RI-CLPM offers another method to examine how victimization may change over early childhood and how internalizing problems predict between and within level differences in victimization over time.

The RI-CLPM model provided a good fit to the data [*χ*2(1) =1.133, *p* = .29, *CFI* = 1.00, *SRMR* = .01, *RMSEA* = .02]. Next a model was fit that constrained the variances of the random intercepts and their covariance to zero. This resembles a traditional CLPM. This model provided a poor fit to the data [*χ*2(4) =1 21.79, *p* < .001, *CFI* = .95, *SRMR* = .07, *RMSEA* = .14] and resulted in a significant decrement in model fit relative to the RI-CLPM [Δ*χ*2(3) = 18.46, *p* < .001]. Third a model was tested that constrained the within paths to equivalence across time (e.g., relational victimization from T1 to T2 and T2 to T3 is held to equivalence across time. This model provided a poor fit to the data [*χ*2(4) =1 21.79, *p* < .001, *CFI* = .95, *SRMR* = .07, *RMSEA* = .14] and provided a significant decrement in model fit compared to the RI-CLPM model [Δ*χ*2(4) = 21.99, *p* < .001].

Given the RI-CLPM restrictiveness of the model (i.e., all but one parameter estimated) and the complexity of the bifactor model, certain parameters were tested to see if they could be constrained to equivalence or removed even though these were not traditionally tested in the RI-CLPM. First, the RI-CLPM was tested without the cross-lagged paths given that there were not hypotheses or expected cross-lagged relations between physical and relational victimization over time. This model provided a good fit to the data [*χ*2(5) = 4.114, *p* = .53, *CFI* = 1.00, *SRMR* = .03, *RMSEA* = .00] and there was no difference in model fit between the model with the cross-lagged paths and the model without the cross-lagged paths [Δ*χ*2(4) = 3.13, *p* = .54]. Next, the within time correlations between relational and physical victimization were constrained to equivalence separately for each pair of timepoints (T1-T3, T1-T2, and T2-T3). Results demonstrated that constraining the T1-T2 [Δ*χ*2(1) = 5.70, *p* = .02] and T1-T3 [Δ*χ*2(1) = 7.01, *p* = .008] within timepoint covariance led to a significant decrement in model fit. However, constraining the T2 and T3 within timepoint covariances across time led to no difference in model fit [Δ*χ*2(1) = 0.08, *p* = .78] and therefore, this constraint was retained in subsequent models. The final model with these constraints provided a good fit to the data [*χ*2(6) = 4.192, *p* = .65, *CFI* = 1.00, *SRMR* = .03, *RMSEA* = .00]. Figure 1 appendix provides standardized estimates of all significant paths in the RI-CLPM.

Children did not deviate significantly in relational victimization from T1 to T2 (*β* = - .31, *p* = .07), but children had significantly higher levels of relational victimization from T2 to T3 than would be expected based on their stable level of relational victimization (*β* = .30, *p* = .005). For physical victimization children had significantly lower levels of physical victimization than would be expected from T1 to T2 (*β* = - .43, *p* = .003), but significantly higher levels of physical victimization from T2 to T3 (*β* = .31, *p* = .04) than would be expected based on their stable level of physical victimization. Overall this suggests that children may experience a decrease in physical victimization as they move to a new classroom context, and then experience an increase in victimization as they remain in a classroom context. Additionally, this effect could also be indicative of changes in teacher’s perceptions of children’s victimization as teachers may become less tolerant or more alert towards victimization as children progress through the school year. There was also significant correlation between the random intercept for relational and physical victimization (*β* = .67, *p* < .001), suggesting that children who demonstrate higher more stable levels of relational victimization are also more likely to experience high stable levels of physical victimization.

FIGURE 3 HERE

Next, a model was specified where the RI-CLPM was regressed on the bifactor model. Covariances between the bifactor model and T1 change factors were constrained to zero to get the model to run. When controlling for children nested within classrooms, the model was a good fit to the data [*χ*2(137) = 165.71, *p* = .05, *CFI* = 1.00, *SRMR* = .07, *RMSEA* = .03]. Girls had higher trait levels of relational victimization than boys (*β* = .28, *p* = .007) and experienced a greater decrease in physical victimization than would be expected at T2 when they transitioned to a new classroom compared to boys (*β* = -.31, *p* = .007). Additionally, higher levels of unsociability was related to lower levels of trait relational victimization (*β* = - .30, *p* = .01).

In sum, the RI-CLPM structural model provides further support for a relation between higher levels of unsociability and lower levels of trait relational victimization across early childhood.