The purpose of this study was to further expand the evidence-based literature on the effectiveness of Differential Reinforcement of Other Behavior (DRO) as an isolated intervention when reducing challenging behaviors. This research study addressed the issues of reinforcement, determining interval length, and momentary versus whole DRO application to further explain these variables as indicated in previous research. Specifically, this study conducted a reinforcement pre-assessment and calculated interval length (interresponse time) on a weekly basis. It examined the effectiveness of implementing whole interval DRO (wDRO) during treatment and momentary interval DRO (mDRO) during maintenance at the classwide level to reduce talking out in typically developing kindergarten children using a multiple baseline across settings design. Measures of treatment acceptability, treatment integrity, and other social validity measures were also utilized.

Results indicated that the intervention effectively reduced talking out in both settings, with average response rates during floor reduced from 4.3 responses per minute (rpm) to 3.2 rpm, and 3.9 rpm to 2.2 rpm during math. Although treatment acceptability scores were below the acceptable range, treatment integrity data revealed high adherence
to the DRO protocol. Social validity, partly measured by the behavior rating scales, indicated no statistical difference in the teacher’s or parents’ reports of behavior intensity. Parents reported a statistical difference in the extent they saw the behavior as problematic at home.

Despite some observed limitations, several implications appear warranted. First, the relative success of momentary interval DRO over whole interval DRO appears to contradict past research. Second, it is important for practitioners to note the crucial issue of teacher acceptability and feasibility. Finally, the value of varying powerful reinforcement and delivering that reinforcement immediately after the behavior continues to demand attention. Implications for research and practice are included.