

PROMOTING UTAH
TEACHER RETENTION
THROUGH
EFFECTIVE CLASSROOM
MANAGEMENT

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ULEAD Final Project Report

Purpose of Research

The primary purpose of the project was to evaluate the impact of implementation of the Good Behavior Game on teacher burnout. Data indicate that teachers in Utah experience greater turnover than national levels (Ni et al., 2017), with research suggesting that implementation of effective classroom behavior management practices can positively impact factors associated with teacher burnout (Hopman et al., 2018).

COVID-19 Interruptions

Data collection had commenced at both the University of Utah and Utah State University sites prior to school closures associated with COVID-19. When schools reopened, the project teams were unable to access school sites due to school restrictions on non-staff members entering school buildings and university restrictions on in-person research. Once all restrictions had been lifted, personnel at Utah State University indicated they no longer had the capacity to participate in the project. As such, project personnel at the University of Utah modified the experimental design to allow for the project to be completed just at the University of Utah site. Changes made consisted of use of multiple baseline design instead of a group design and subsequent changes in data collection frequency (described below).

Participants

A total of three teachers participated in the study. Teachers were recruited from a Title I school. All teachers had a minimum of 12 years of teaching experience and self-reported experiencing a substantial level of burnout. Each class was comprised of between 17 and 30 students. Participating classrooms were 3rd, 4th and 5th grade classrooms.

Measurement and Design

Measurement strategies included assessment of teacher burnout and student behavior. The original project proposal indicated planned use of the Maslach Burnout Inventory-Educators Survey as a pre- post-measure. Due to data collection interruption due to COVID-19 (e.g., school closures, limited access to classrooms), measurement was modified to collect more intensive measurement of teacher stress and burnout on a smaller number of teachers. More specifically, participating teachers completed daily ratings of stress and burnout via Subjective Units of Distress Scale (SUDS) ratings. SUDS ratings have a substantial history of empirical and clinical use (e.g., Lattari et al., 2018), and represent a change-sensitive means of assessing stress.

Classroom observations of student behavior were also conducted with increased intensity. In the original proposal, student behavior was to be assessed at

pre- and post-intervention. With the increased frequency of teacher completion of SUDS ratings, classrooms were observed with greater frequency to allow for a more detailed analysis of the association of intervention implementation, student behavior, and teacher stress and burnout.

Originally, we proposed an experimental design that consisted of random assignment to treatment and control conditions. Due to interruptions associated with COVID-19, we elected to modify the experimental design. More specifically, a multiple baseline design was selected. Multiple baseline designs represent an empirical design that is empirically rigorous and allow for fine grained analyses of associations between variables of interest. The multiple baseline design employed in the study followed Institute for Education Sciences (IES) What Works Clearinghouse design standards, including number of replications, intensity of data collection, and sufficiency of interobserver agreement (e.g., Kratochwill et al., 2010; IES, 2020). Data analysis consisted of both visual analysis and calculation of effect size using widely utilized single case effect size statistics (i.e., Tau-U; Parker et al., 2011).

The multiple baseline design consisted of two phases: baseline and intervention. During baseline, teachers implemented classroom management strategies as usual. Following termination of the baseline phase, teachers were trained in implementation of the Good Behavior Game and encouraged to

implement the intervention daily. Once trained, intervention phase data collection commenced.

Results

Teacher Burnout. Figure 1 depicts SUDS ratings for Teacher 1, 2, and 3. During baseline, Teacher 1 indicated stable and moderate levels of stress and burnout. Upon implementation of the Good Behavior Game, Teacher 1 immediately reported lower levels of stress and burnout. Although some variability was observed throughout the intervention phase, the phase was characterized by lower SUDS ratings. The change from baseline to intervention represents a 50% decrease in SUDS ratings by Teacher 1. Calculation of Tau-U indicated a Tau-U score of $-.92$, representing a very large decrease in teacher SUDS ratings.

Teacher 2 indicated moderate and increasing levels of stress and burnout across the baseline phase. Upon implementation of the Good Behavior Game, immediate reductions in SUDS ratings were observed. Although some variability in ratings was observed across the intervention phase, a notable reduction in ratings was apparent. Changes from baseline to intervention represent a 31% decrease in SUDS ratings for Teacher 2. Calculation of Tau-U indicated a Tau-U score of $-.65$, representing a large decrease in teacher SUDS ratings.

Teacher 3 indicated low-to-moderate levels of stress and burnout on baseline SUDS ratings. Upon introduction of the Good Behavior Game, a slight

decrease in level of SUDS ratings was observed across the intervention phase. Comparing baseline to intervention, a reduction of 18% was observed for SUDS ratings. Calculation of Tau-U indicated a Tau-U score of $-.20$, representing a moderate decrease in teacher SUDS ratings.

Student Behavior. Figure 2 depicts data collected on student academically engaged behavior across baseline and intervention phases for Classroom 1, 2, and 3. During baseline, students in Classroom 1 demonstrated moderate levels of academically engaged behavior. Upon introduction of the Good Behavior Game, immediate and sustained increases in academically engaged behavior were observed. Although variability was observed initially, increases in academically engaged behavior were observed to be stable at the conclusion of the phase. Calculation of Tau-U indicated a Tau-U score of $.98$, representing a very large increase in academically engaged behavior of students in Classroom 1 during the intervention phase.

During baseline, students in Classroom 2 demonstrated moderate-to-high levels of academically engaged behavior. Implementation of the Good Behavior Game was associated with a slight increase in level of academically engaged behavior across the intervention phase. Calculation of Tau-U indicated a Tau-U score of $.69$, representing a large statistical change in academically engaged behavior of students in Classroom 2 during the intervention phase.

During baseline, students in Classroom 3 demonstrated moderate levels of academically engaged behavior, with a degree of variability present across the baseline phase. Upon introduction of the intervention phase, an immediate increase in academically-engaged behavior was observed, with levels remaining increased throughout the intervention phase. Calculation of Tau-U indicated a Tau-U score of .97, representing a very large increase in in academically engaged behavior of students in Classroom 3.

Relationship Between Teacher Stress and Student Behavior. A Pearson product-moment correlation coefficient was calculated to evaluate the relationship between teacher stress and student behavior. For Teacher 1, a statistically significant correlation of $r = -.64$ ($p = .001$) was observed, representing a strong negative relationship between teacher stress and student behavior—with teacher stress decreasing as student academically engaged behavior increased. For Teacher 2, the relationship between teacher stress and student behavior was found to be moderate ($r = -.34$), with the relationship approaching statistical significance ($p = .068$). For Teacher 3, the relationship between teacher stress and student behavior was found to be weak ($r = .184$; $p = .358$). Overall, the relationship between teacher reported stress and student behavior was found to be weak-to-moderate ($r = -.26$), with the association being found to be statistically significant ($p = .022$).

Discussion and Implications

Overall, the results of the study support initial hypotheses. More specifically, data support previous suggestions that effective classroom management is associated with decreases in teacher stress and burnout. Reductions in teacher stress and burnout, as well as increases in student academically engaged behavior, were observed across all participating teachers and classrooms. As such, results of the study indicate that implementation of empirically-supported classroom management strategies such as the Good Behavior Game may serve to directly impact teacher well-being.

Results of the study have direct implications for teachers and classrooms. First, findings suggest that classroom management supports may be considered beneficial for teachers experiencing burnout. School support personnel (e.g., school psychologists, social workers, administrators) should work with teachers to implement strategies such as the Good Behavior Game in these classrooms. In addition to directly benefiting teacher stress and burnout, it is also expected that these interventions would also benefit students within these classrooms, increasing academic engagement. Second, the findings of the current study have implications for the training of new teachers. Equipping new teachers with effective classroom management strategies may serve as a proactive means of preventing burnout and reducing the likelihood that new teachers leave the profession after few years in

the classroom. Thus, effectively equipping teachers with tools for managing challenging behavior within the classroom may directly impact shortages of teachers by limiting the outflow of early-career teachers exiting the field.

The results of the study provide robust support for the role that effective classroom management plays in teacher stress and burnout. However, future replications of the procedures implemented in the study are needed to evaluate the effects across diverse schools, teachers, and classroom types (e.g., special education settings). We plan to continue evaluating the effects of the Good Behavior Game on teacher stress and burnout, as well as conduct trainings across school districts in implementation of the Good Behavior Game as a means of supporting both teacher and student success.

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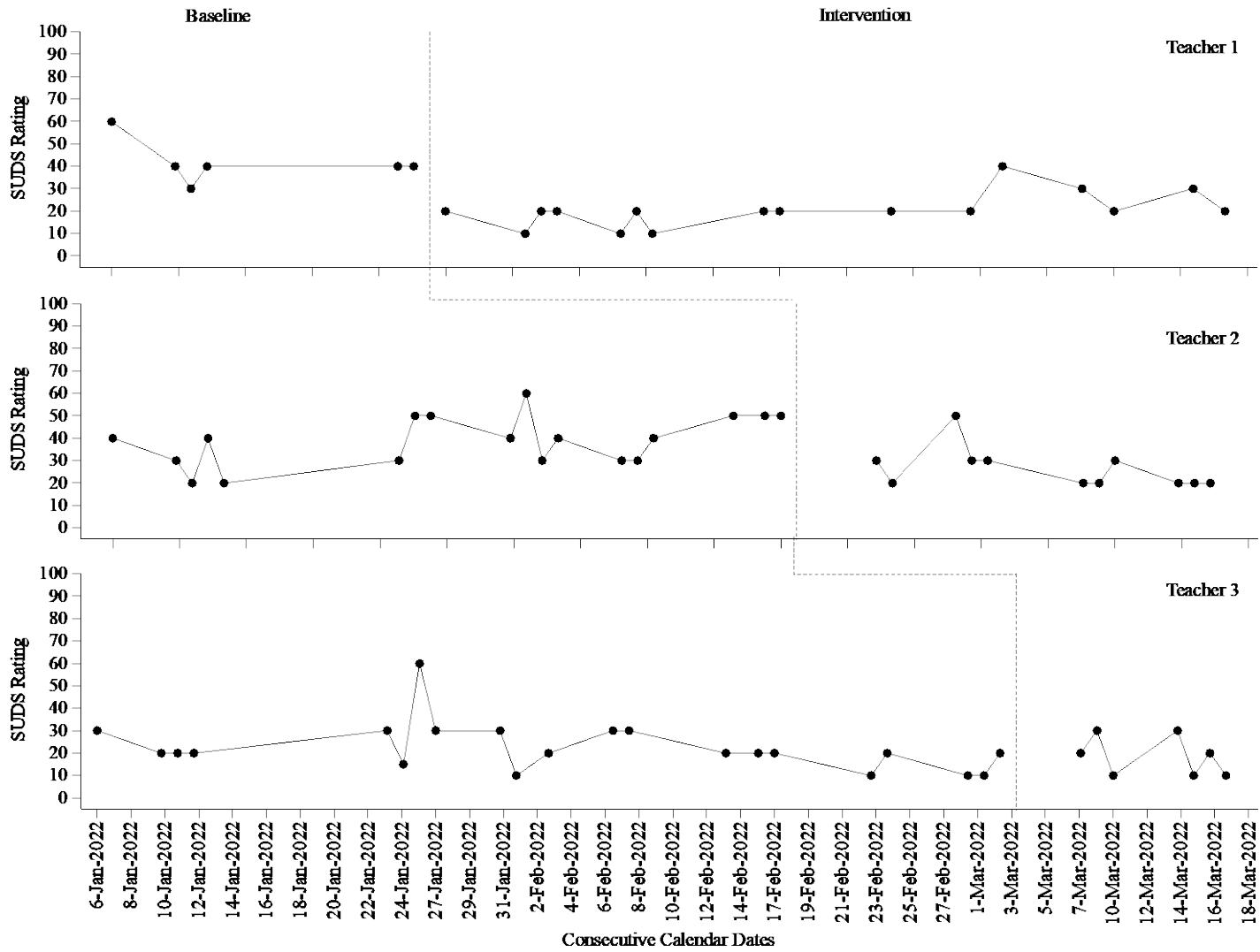


Figure 1.
SUDS Ratings for Teachers 1, 2, and 3

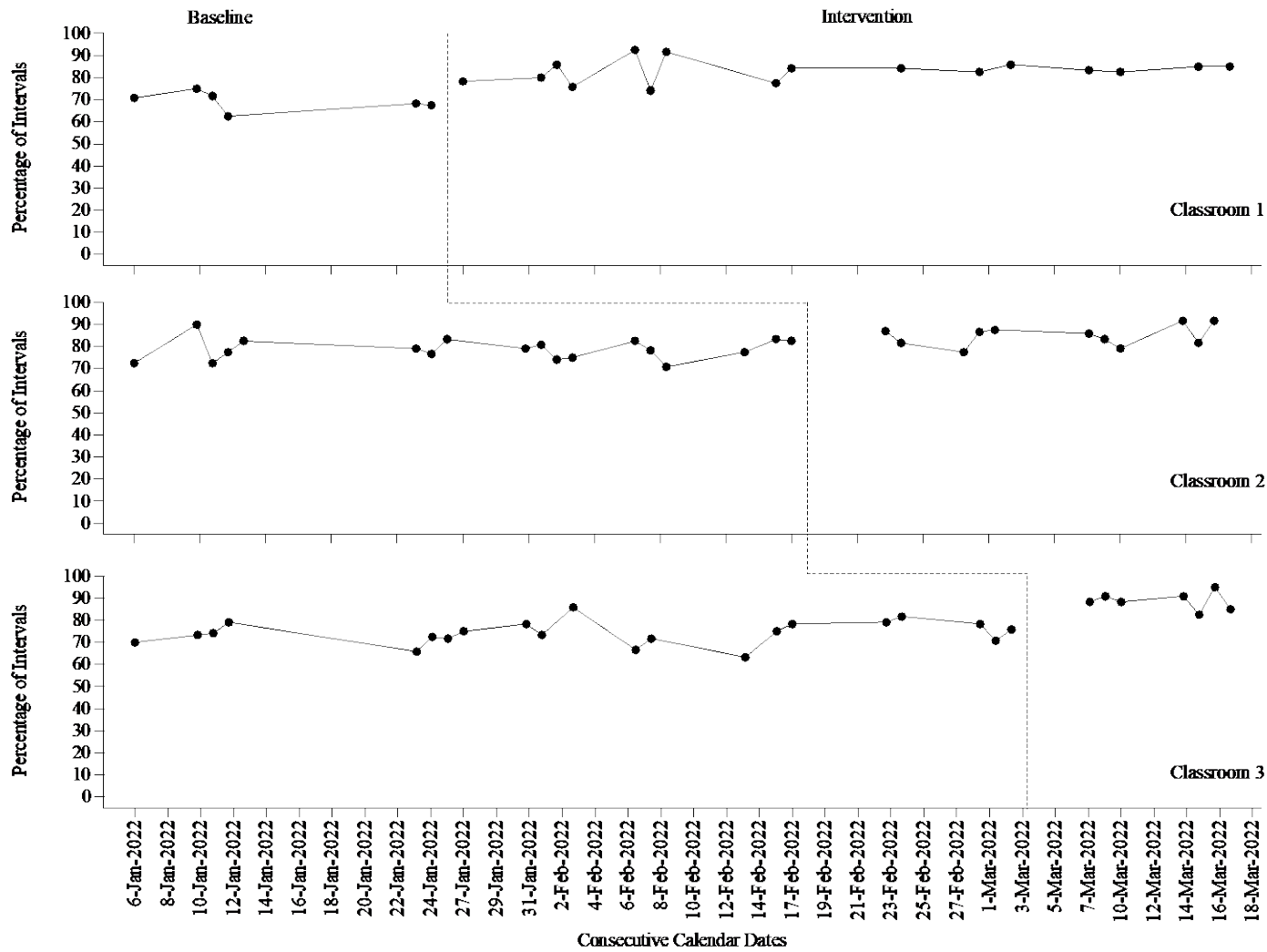


Figure 2. Percentage of Academically Engaged Behavior of Students in Classrooms 1, 2, and 3.