

Abstract Title Page
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Presentation #3

Title: The effect of cooperative learning on inter ethnic relations in schools

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Abstract Body

Limit 5 pages single spaced.

Background / Context:

The single most influential text in the modern history of efforts to enhance inter-group and inter-ethnic relationships is a short section of Allport's (1954) *The Nature of Prejudice* in which he proposed what is now called the *Contact hypothesis*. Allport predicted that contact between different groups would lead to reduction in prejudice provided certain conditions were met. The principal conditions were that group members should work together:

- Towards a common goal
- With interdependent roles
- With equal status
- In the context of policies which endorse the contact

A considerable amount of research evidence has supported his position (Binder et al., 2009; Paolini, Hewstone, Harwood, & Cairns, 2006; Pettigrew, 1998; Wagner, Tropp, Finchinescu, & Tredoux, 2008). On one hand it has been found that passive forms of inter-group contact such as simple desegregation do not reduce prejudice and discrimination (Brown & Hewstone, 2005; Pedersen, Walker, & Wise, 2005; Schofield & Eurich-Fulcer, 2003). On the other hand contact under most or all of the conditions above has consistently been found to have positive effects on inter- group attitudes with a wide variety of groups, settings and age groups (see Pettigrew & Tropp, 2006 for meta-analysis). A dilemma for the policy maker however is how to routinely engineer situations which meet the conditions of contact specified above.

Cooperative learning refers to small group teaching and learning strategies which actively seek to promote inter-dependence among group members such that "Each member of a team is responsible not only for learning what is taught but also for helping teammates learn" (Ryan, Reid, & Epstein, 2004). Pupils work with little teacher supervision (Deering, 1989, as cited by Cooper & Slavin, 2004) on carefully planned and monitored activities (Slavin & Cooper, 1999) in such a way that each participant can achieve their learning goal if and only if the other group members achieve theirs. Cooperative Learning may be distinguished from regular group work by both the level of planning by teachers and by the interdependence of the group members.

Cooperative learning strategies have been shown to have positive effects on many learning outcomes such as achievement (Cohen et al., 1997; Cohen & Lotan, 1997; Slavin, 1995), self-esteem (De Vries, Slavin, Fennessey, Edwards, & Lombardo, 1980; Johnson, Johnson, Tiffany, & Zaidman, 1983; Slavin, 1980; Stephen, 1978), social competency (Cohen & Lotan, 1995; Ginsburg-Block, Rohrbeck, & Fantuzzo, 2006; Roseth, Johnson, & Johnson, 2008), the quality of the learning environment (Aronson & Osherow, 1980; Aronson & Patnoe, 1997; Blaney, Stephen, Rosenfield, Aronson, & Silkes, 1977; Geffner, 1978, as cited by Aronson & Osherow, 1980) and other domains. Cooperative learning is often promoted on the basis of these benefits, it is not inherently designed to reduce prejudice or improve inter-group attitudes (Mckown, 2005; Singh, 1991). However when used in classrooms which involve different ethnic groups, cooperative learning techniques reproduce many of the conditions specified by the contact

hypothesis above* and have been advanced as tools to improve inter-ethnic relations in schools (McKown, 2005).

The positive impact of Cooperative Learning strategies on inter-group relations among children has a long documented history (early examples include Cohen & Roper, 1972; Cohen, Lockheed, & Lohman, 1976; Ziegler, 1981; Johnson and Johnson, 1981; Slavin and Oickle, 1981; Sharan, Hertz-Lazarowitz, Bejarano, Raviv, Sharan, 1984). A meta-analysis by Johnson and Johnson (1989) found that cooperation between majority and minority group members was associated with greater inter-group friendships. A review by Ginsburg-Block et al (2006) of Peer Assistant Learning interventions (which include Cooperative learning) found a positive impact on 'social outcomes' under which they include positive inter-ethnic attitudes. A review of 19 field experiments using 8 different Cooperative Learning paradigms by Cooper and Slavin (2004) found generally positive effects on prejudice and discrimination among children in 4 to 12th grades where the minority presence was between 10% and 61%.

Some conflicting findings have emerged however. The following have been noted as moderating factors by researchers or commentators:

- The type of Cooperative Learning program (Cooper & Slavin, 2004; Singh, 1991).
- Context of program (Cooper & Slavin, 2004)
- The group looked at (i.e. minority, majority or both) – (Aronson & Osherow, 1980; Slavin & Oickle, 1981).
- Measures used to assess inter-ethnic relations (Slavin, Leavey & Madden, 1984).
- Age of participants involved (McKown, 2005).

Cooperative Learning strategies are particularly appealing in policy terms. They are cheap and can be easy to implement (relative to alternatives). They can be used with different ages and abilities and can be incorporated into existing school curricula (Singh, 1991; Slavin, 1985). Moreover, they can be presented to schools and educational policy makers as a means not only of improving interethnic relations but also as a way of improving a variety of more traditional 'academic' outcomes (McKown, 2005).

Purpose / Objective / Research Question / Focus of Study:

The aim of this study is to synthesize all existing empirical evidence on the effects of Cooperative Learning on inter-ethnic relations in school settings. The review is:

- Systematic including published and unpublished research
- Up-to-date
- Inclusive of all school going age groups (4 to 18 years of age)
- Inclusive of only school based, valid cooperative learning strategies

This review was required because existing reviews were:

* The relationships between Cooperative Learning theory and inter-group relations can also be understood in terms of Social Interdependence Theory (Deutsch, 1949; 1962; Johnson & Johnson, 1989).

1. Not systematic (Cooper and Slavin, 2004; Ginsburg-Block et al. 2006; Roseth et al., 2008)
2. Narrative, non quantitative (McKown, 2005; Pederson et al., 2005; Paluck & Green, 2008)
3. Country specific and out of date (Cohen, Lotan, & Leechor, 1989; Johnson & Johnson, 1989)
4. Focused on one particular Cooperative Learning strategy (Bratt, under review, on Jigsaw).
5. Focused on more general outcomes such as social relationships (Roseth et al., 2008).
6. Include Cooperative Learning as one of a much wider undifferentiated range of teaching strategies or general contact situations (Ginsburg-Block et al., 2006; Pettigrew and Troop, 2006; Paluck & Green, 2008).

Where data is available the review also uses moderator analysis to examine the impact of the following variables on effectiveness:

- Type of cooperative learning paradigm
- Characteristics of participants (age, gender, majority-minority status etc.)
- Implementation by teacher / researcher / teacher with support
- Type of outcome measure used (cross-ethnic friendship, attitudes etc.)
- Duration of the program
- Point(s) in time at which outcome measurements were taken
- Teaching strategy used for control group
- Inter-group and national context

Setting:

Studies used in this meta-analysis were all school based (excluding after-school programs). The initial search criteria allowed for studies from all over the world, published in any language, to be included. In the final sample, the majority of studies are US based but there are smaller numbers from 8 other countries.

Population / Participants / Subjects:

The population for this meta-analysis was all existing research studies that included:

- Cooperative learning
- School children (primary or secondary) as participants.
- Full data on at least one outcome measure assessing children’s behavior, attitudes, emotions or beliefs towards at least one ethnic, religious or linguistic out-group.
- A research design which met our inclusion criteria (see Research Design below).

Intervention / Program / Practice:

Cooperative learning is a generic term that refers to many different instructional practices which share common principals. We defined cooperative learning as utilization of one of the 11 most common approaches (Cooper and Slavin, 2004; Johnson, Johnson and Stanne, 2000) and use a

twelfth category to represent all other forms of cooperative learning. The 11 most common approaches are:

- Jigsaw method (Aronson et al., 1978)
- Learning Together (Johnson and Johnson, 1983)
- Constructive Controversy (Johnson and Johnson, 1985)
- Student Team Achievement Division (STDA, Slavin, 1978)
- Complex instruction (Cohen, 1986)
- Team-Games-Tournament (DeVries & Edwards, 1974)
- Team-Assisted-Individuation (Slavin et al., 1984)
- Team-Accelerated Instruction (Slavin, Leavey, & Maddey, 1986)
- Group Investigation (Sharan and Sharan, 1976)
- Cooperative Learning Structures (Kagan, 1985)
- Cooperative Integrated Reading & Composition (CIRC, Stevens et al, 1987)

In addition a program was identified as ‘Other Cooperative Learning’ if it did not fall under any of the headings above but exhibited the following characteristics:

- Small group work (from three to maximum 8 members)
- Tasks and activities carefully planned in advance
- There is interdependence among team members such that “each member of a team is responsible not only for learning what is taught but also for helping teammates learn” (Ryan et al, 2004, p.332). This means that each member is a *necessary* source of information / support for all the others’ learning.

Research Design:

This study is based on a systematic review and meta-analysis of studies which utilized randomized field experiments and quasi-experimental designs. Quasi-experimental studies all included a pre-test. All studies included a control group which received an intervention other than Cooperative Learning or no intervention at all.

Data Collection and Analysis:

Data collection was conducted by means of an exhaustive and systematic review. The review involved:

- A keyword search of all relevant online abstract and literature databases
- A search of references provided by previous reviews and pertinent material.
- A hand search journals which have published two or more primary studies.
- A keyword internet search.
- A search of conference proceedings and the publications of government and professional specialized agencies.
- Contact with leading scholars in this area - defined as authors involved in two or more studies which met the eligibility criteria.

The meta-analyses was conducted according to the procedures and guidelines set out in Lipsey and Wilson (2001).

Findings / Results:

The analysis is currently in the final stages of completion. Some of the final stages of the grey literature search have to be completed and the statistical analysis of data to be finalized. Three paid staff (and one volunteer) are currently working on the project. Funding for the research ends in December 2010.

Conclusions:

Our analysis not only focuses on the question “Does cooperative learning have an impact on inter-ethnic relations in schools?” but also seeks to determine where, when and under what conditions it is most effective.

Appendices

Not included in page count.

Appendix A. References

- About, F. (2005). The development of prejudice in childhood and adolescence. . In J. F. Dovidio, P. Glick & L. Rudman (Eds.), *On the nature of prejudice: fifty years after Allport*. Malden, MA: Blackwell Publishing.
- Allport, G. W. (1954). *The nature of prejudice*. . Cambridge, MA: Addison- Wesley Press.
- Aronson, E. (1978). *The Jigsaw classroom*. Beverley Hills, CA Sage.
- Aronson, E., & Osherow, N. (1980). Cooperation, pro-social behaviour and academic performance. Experiments in the desegregated classroom. In Bricrman (Ed.), *Applied Social Psychology* (Vol. 1, pp. 163-197). Newbury Park, CA: Sage.
- Aronson, E., & Patnoe, S. (1997). *The Jigsaw classroom* New York: Longman.
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., et al. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology* 96(4), 843-856.
- Blaney, N. T., Stephen, C., Rosenfield, D., Aronson, E., & Sikes, J. (1977). Interdependence in the classroom. a field study. *Journal of Educational Psychology*, 69(2), 121-128.
- Bratt, C. (in review).The questionable promotion of the jigsaw classroom for cooperative groups at schools.
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact In *Advances in experimental Social Psychology* (Vol. 37, pp. 255-343). San Diego, CA, US: Elsevier Academic Press.
- Cameron, J. A., Alvarez, J. M., Ruble, D. N., & Fuligni, A. J. (2001). Children's lay theories about ingroups and outgroups: reconceptualizing research on prejudice *Personality and Social Psychology Review*, 5(2), 118-128.
- Cohen, E. (1986). *Designing groupwork: Strategies for the heterogeneous classroom*. New York: Teachers College Press.
- Cohen, E. G., Bianchini, J. A., Cossey, R., Holthuis, N. C., Morphew, C. C., & Whitcomb, J. A. (1997). What did students learn? In E. G. Cohen & R. A. Lotan (Eds.), *Working for equity in heterogeneous classrooms: Sociological theory in practice* (pp. 137-165). New York: Teacher College Press.
- Cohen, E. G., Lockheed, M., & Lohman, M. (1976). The Center for Interracial Cooperation: A field experiment. *Sociology of Education*, 49, 47-58.
- Cohen, E. G., & Lotan, R. A. (1995). Producing equal status interaction in the heterogeneous classroom. *American Educational Research Journal* 32, 99-120.
- Cohen, E. G., & Lotan, R. A. (Eds.). (1997). *Working for equity in heterogenous classrooms: Sociological theory in practice*. New York: Teachers College Press.
- Cohen, E. G., & Roper, S. (1972). Modification of interracial interaction disability: An application of status characteristics theory. *American Sociological Review* 37, 648-655.
- Cooper, R., & Slavin, R. E. (2004). Cooperative learning: An instructional strategy to improve intergroup relations. In W. G. Stephan, Vogt, W.P. (Ed.), *Education Programs for improving intergroup relations* (pp. 323). N.Y., US: Teachers College Press.
- Deutsch, M. (1949). A theory of cooperation and competition. *Human Relations*, 2, 129-151.

- Deutsch, M. (1962). Cooperation and trust: Some theoretical notes In M. R. Jones (Ed.), *Nebraska symposium on motivation* (pp. 275-319). Lincoln: University of Nebraska Press.
- DeVries, D., & Edwards, K. (1974). Student teams and learning games: Their effects on cross-race and cross-sex interaction. *Journal of Educational Psychology*, 66, 741-749.
- De Vries, D. L., Slavin, R. E., Fennessey, G. M., Edwards, K. J., & Lombardo, M. M. (1980). *Teams-games tournament. The team learning approach*. Englewood Cliffs, NJ: Educational Technology Publications
- Ginsburg-Block, M. D., Rohrbeck, C. A., & Fantuzzo, J. W. (2006). A meta-analytic review of social, self-concept, and behavioral outcomes of peer-assisted learning. *Journal of Educational Psychology*, 98(4), 732-749.
- Johnson, D. W., & Johnson, R. T. (1981). Effects of cooperative and individualistic learning experience on interethnic interaction. *Journal of Educational Psychology*, 73, 444-449.
- Johnson, D. W., & Johnson, R. T. (1983). *Learning Together and Alone*. New Jersey: Prentice Hall.
- Johnson, D.W., & Johnson, R.T. (1985). Classroom conflict: Controversy versus debate in learning groups. *American Educational Research Journal*, 22, 237-256.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Edina, MN: Interaction.
- Kagan, S. (1985). *Cooperative learning resources for teachers*. Riverside, CA: University of California at Riverside.
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical Meta-analysis* (Vol. 49). Thousand Oaks, CA: Sage Publications.
- McKown, C. (2005). Applying ecological theory to advance the science and practice of school-based prejudice reduction interventions. *Educational Psychologist*, 40(3), 177-189.
- Nesdale, D. (2001). The development of prejudice in children. In M. A. Augoustinos & K. J. Keynolds (Eds.), *Understanding prejudice, racism, and social conflict* (pp. 57-73). London: London Sage
- Oortwijn, M. B., Boekaerts, M., Vedder, P., & Fortuin, j. (2008). The impact of a cooperative learning experience on pupils' popularity, non-cooperativeness, and interethnic bias in multiethnic elementary schools. *Educational Psychology*, 28(2), 211-221.
- Paluck, E., & Green, D. P. (2008). Prejudice reduction: What works? A review and assessment of research and practice *Annual Review of Psychology*, 60, 339-367.
- Paolini, S., Hewstone, M., Harwood, J., & Cairns, E. (2006). Intergroup contact and the promotion of intergroup harmony: The influence of intergroup emotions. In R. Brown & D. Capozza (Eds.), *Social identities: Motivational, emotional, cultural influences*. Hove, UK: Psychology Press.
- Pedersen, A., Walker, I., & Wise, M. (2005). "Talk does not cook rice": Beyond anti-racism rhetoric to strategies for social action. *Australian Psychologist*, 40(1), 20-30.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory *Journal of Personality and Social Psychology*, 90(5), 751-783.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents' achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin*, 134(2), 223-246.
- Ryan, J. B., Reid, R., & Epstein, M. H. (2004). Peer-mediated intervention studies on academic

- achievement for students with EBD - A review. *Remedial and Special Education*, 25(6), 330-341.
- Schofield, J. W., & Eurich-Fulcer, R. (2003). when and how school segregation improves intergroup relations. In R. Brown, Gaertner, S. (Ed.), *Handbook of Social Psychology: Intergroup processes* (pp. 475-494). Oxford: Blackwell.
- Sharan, S., & Sharan, Y. (1976). *Small group teaching*. Englewood Cliffs, NJ: Educational Technology Publications.
- Sharan, S., Hertz-Lazarowitz, R., Bejarano, Y., Raviv, S., & Sharan, Y. (1984). *Cooperative learning in the classroom: Research in desegregated schools*. Hillsdale, NJ: Erlbaum.
- Singh, B. R. (1991). Teaching methods for reducing prejudice and enhancing academic achievement for all children. *Educational studies* 17(2), 157-171.
- Slavin, R. E. (1980). Cooperative learning. *Review of Educational Research* 50, 315-340.
- Slavin, R. E. (1983). When Does Cooperative Learning Increase Student-Achievement. *Psychological Bulletin*, 94(3), 429-445.
- Slavin, R. E. (1978). Student teams and comparison among equals: Effects on academic performance and student attitudes. *Journal of Educational Psychology*, 70(4), 532-538.
- Slavin, R. E. (1995). Cooperative learning and intergroup relations. In J. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education*. (pp. 628-634). New York: Macmillan.
- Slavin, R. E., & Cooper, R. (1999). Improving intergroup relations: Lessons learned from cooperative learning programs. *Journal of Social Issues*, 55(4), 647-663.
- Slavin, R. E., Leavey, M., & Madden, N. A. (1984). Combining cooperative learning and individualized instruction: Effects on students' mathematics achievement, attitudes, and behaviours. *Elementary School Journal*, 84, 409-422.
- Slavin, R., Leavey, M., & Madden, N. (1986). *Team accelerated instruction: Mathematics*. Watertown, MA: Charlesbridge.
- Slavin, R. E., & Oickle, E. (1981). Effects of cooperative learning teams on student achievement and race relations: treatment by race interactions *Sociology of Education*, 54, 174-180.
- Stephen, W. G. (1978). School desegregation. An evaluation of predictions made in Brown vs Board of Education. *Psychological Bulletin*, 85, 217-238.
- Stevens, R., Madden, N., Slavin, R., & Farnish, A. (1987). Cooperative integrated reading and composition: Two field experiments. *Reading Research Quarterly*, 22, 433-454.
- Wagner, U., Tropp, L. R., Finchinescu, G., & C., T. (Eds.). (2008). *Improving intergroup relations. Building on the legacy of Thomas F. Pettigrew. Social Issues and interventions*. Malden: Blackwell Publishing
- Ziegler, S. (1981). The effective of cooperative learning teams for increasing cross-ethnic friendship: Additional evidence. *Human Organization* 40, 24-268.

Abstract Title Page
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Presentation #4

Title: Teacher Classroom Management Practices: Effects on Disruptive or Aggressive Student Behavior

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Abstract Body

Limit 5 pages single spaced.

Background / Context:

Description of prior research and its intellectual context.

Disruptive behavior in schools has been a source of concern for school systems for many years and, in fact, the single most common request for assistance from teachers is related to behavior and classroom management (Rose & Gallup, 2005). Students who are disruptive experience less academic engaged time, tend to have lower grades, and perform worse on standardized tests compared to students in well managed classrooms (Dolan, Kellam, Brown, Werthamer-Larsson, Rebok, Mayer, et al., 1993). Furthermore, teachers' attempts to control disruptive behaviors cost considerable time which often comes at the expense of academic instruction. Without the competence to address disruptive student behavior, teachers find it more challenging to meet the instructional demands of the classroom (Emmer & Stough, 2001).

Effective classroom management is also related to prevention efforts. The progression and malleability of maladaptive behaviors is affected by classroom management practices of teachers in the early grades. For example, Greer-Chase and colleagues found that aggressive students in disruptive classroom environments are more likely to be aggressive in later grades without effective classroom management (Greer-Chase et al.). Research-based approaches to classroom management are necessary to improve both academic and behavioral outcomes for students at-risk for behavior disorders.

Extensive theoretical and empirical bases exist for classroom management practices. In general, classroom management practices historically have been identified by observing effective teachers' behavior or combining behavioral approaches that have been established through research on effective behavior change procedures. Prior research falls into two broad categories: (1) observation studies used to identify how effective teachers organize and manage their classrooms (e.g., Anderson et al., 1979; Kounin, 1970); and (2) experimental studies examining components of classroom management in isolation or in various combinations (e.g., Becker, Madsen, & Arnold, 1967; Madsen, Becker, & Thomas, 1968). Recently, a systematic review of classroom management practices was conducted (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). This evaluation of 81 studies identified 20 general practices that met the criteria for evidence-based. These general practices fell into five broad categories: (1) maximize structure and predictability, (2) post, teach, review, and provide feedback on expectations, (3) actively engage students in observable ways, (4) use a continuum of strategies to acknowledge appropriate behavior, and (5) use a continuum of strategies to respond to inappropriate behavior (Simonsen et al.). The results of this review were an important first step in identifying the evidence base for specific practices typically used in classroom management approaches.

Prior meta-analyses have focused on school-based prevention efforts that reduce problem behavior in schools (i.e., Wilson, Gottfredson, and Najaka, 2001; Wilson & Lipsey, 2006; Wilson, Lipsey, & Derzon, 2003). These meta-analyses were broad in their scope of interventions in the review and included whole-school programs such as social skills packages. A greater understanding of the evidence base for narrowly defined classroom management

practices orchestrated by classroom teachers is necessary to further define the effects of classroom management.

Purpose / Objective / Research Question / Focus of Study:

Description of the focus of the research.

Despite the large research base grounded in behavioral theory for strategies to increase appropriate behavior and prevent or decrease inappropriate behavior in the classroom, a systematic review of multi-component universal classroom management research is necessary to establish the effects of teachers' universal classroom management approaches. This review examines the effects of teachers' universal classroom management practices in reducing disruptive, aggressive, and inappropriate behaviors. The specific research questions addressed are: Do teacher's universal classroom management practices reduce problem behavior in classrooms with students in kindergarten through grade 12? What components make up the most effective and efficient classroom management programs? These questions were addressed through a systematic review of the classroom management literature and a meta-analysis to calculate the magnitude of the effects of classroom management on disruptive or aggressive student behavior. In addition, limitations found in this body of research will be highlighted.

Setting:

Description of the research location.

Eligible studies examined the impact of interventions designed for the whole class for school-aged subjects in either general education or special education classrooms during school hours. Interventions in residential facilities or special schools (e.g. day treatment facilities) were not eligible for inclusion. Studies from any country that met all other eligibility criteria were eligible although the majority was from the U.S.

Population / Participants / Subjects:

Description of the participants in the study: who, how many, key features or characteristics.

The population of participants in the sample was school-aged children in kindergarten through grade 12 or the equivalent formal schooling in countries with different grade structures from the U.S. The approximate ages of the participants ranged from 5-18.

Intervention / Program / Practice:

Description of the intervention, program or practice, including details of administration and duration.

For the purpose of this review, classroom management is defined as a collection of classroom procedures implemented by teachers in classroom settings with all students for the purposes of supporting prosocial behavior and preventing and reducing inappropriate behavior. These procedures are considered universal because they are implemented with the entire class rather than an individual or subgroup requiring additional behavioral support. The classroom management practices reviewed were required to be actions performed by the classroom teacher in the context of the classroom, with the expectation that they would reduce problem behavior for the students in the classroom. Studies that used an intervention with the classroom teacher (e.g., teacher training in classroom management) but still had the teacher as implementer of the

strategies and targeted student problem behavior as an outcome were included in this review. Additional inclusion criteria were:

- a) Interventions delivered universally to all subjects. Pull-out or small group interventions (e.g., small group social skills) were not eligible.
- b) Interventions that began treatment outside of the classroom in a small group and then transferred it into the classroom were not eligible.
- c) Additional treatment components (e.g., parent training) were allowed provided there was at least one outcome variable measuring treatment effects with students in the classroom.

Research Design:

Description of research design (e.g., qualitative case study, quasi-experimental design, secondary analysis, analytic essay, randomized field trial).

A systematic review and meta-analysis of teachers' classroom management practices was used to analyze the data. Meta-analysis methodology was standard based on current practices (Lipsey & Wilson, 2001; Hedges 2007). The methods are described below.

Data Collection and Analysis:

Description of the methods for collecting and analyzing data.

A detailed coding protocol and screening sheet was developed specifying eligibility criteria for inclusion in the analysis. A comprehensive review of the literature was performed and potential studies were identified and screened for inclusion. Each study was coded on 33 variables (e.g., sample size, sampling procedures, dependent variable, duration of treatment). Table 1 shows a summary of study characteristics. (Please insert Table 1 here)

Effect sizes were calculated based on the available data in the study, most typically treatment and comparison group means on posttest data with standard deviations. The standardized mean difference effect size statistic was used to code classroom management effects. In cases where treatment and control group means were not available, effect sizes were estimated based on the available data in the study using procedures described by Lipsey and Wilson (2007). Standard mean effect sizes were adjusted using Hedges small-sample correction to produce an unbiased estimate of effects in small samples (Hedges & Olkin, 1985). Other adjustments were made based on the data presented in each study (e.g., covariate, pretest). Some data was reported at the individual student level while others were reported at the classroom level. Individual student data were adjusted to classroom level using an estimate of the ICC between behavior and classroom outcomes. All effect sizes are coded such that larger effect sizes represent positive outcomes (e.g., less disruptive or aggressive behavior).

Findings / Results:

Description of the main findings with specific details.

The random effects analysis on the 12 effect sizes produced a statistically significant mean classroom effect size of 0.80 (SE = 0.15, $z = 5.44$, $p = .000$) for ICC=.05 and a statistically significant mean classroom effect size of .71 (SE = .13, $z = 5.53$, $p = 0.00$) for ICC=.10 indicating that the participants in the classroom management intervention conditions exhibited

significantly less problem classroom behavior after intervention. Figure 1 shows the forest plot of the effect sizes using ICC=.05 and Figure 2 shows the forest plot of the effect sizes using ICC=.10. The sample of effect sizes ranged from -0.05 to 1.74 (ICC=.05) and from -.03 to 1.56 (ICC=.10) showing an overall positive effect for teachers' classroom management practices. Additional analyses were conducted on the sample of effect sizes to determine if the sample was biased or if the sample was pulled from the same population of effect sizes.

The test for homogeneity was not statistically significant for ICC=.05 ($Q= 13.72$, $df = 11$, $p = .25$) or for ICC=.10 ($Q= 10.67$, $df = 11$, $p = .47$) and therefore failed to reject the hypothesis that the sample of effect sizes are homogeneous (i.e., any variability is likely due to sampling error). Therefore there was not enough variability between studies to justify further analysis to examine potential moderators.

Because of the large number of studies using a specific manualized program ($N = 7$; Classroom Organization and management Program; COMP) a posthoc test was conducted to compare COMP and non-COMP studies. An inverse variance weighted analysis using a Q_{between} was conducted to compare differences in mean effect sizes between COMP studies and the others. The statistically significant mean effect size for studies categorized as "other" was $ES=.88$ ($p = .00$) using ICC=.05 and $ES=.66$ ($p = .00$) using ICC=.10. COMP studies produced a statistically significant effect size $ES=.75$ ($p = .00$) (see Table 2). Based on the random effects analysis, differences between mean effect sizes were not statistically significant for either ICC=.05 ($Q_{\text{between}} = .38$, $df = 1$, $p = .54$) or ICC=.10 ($Q_{\text{between}} = .07$, $df = 1$, $p = .54$). These results indicate that on average, there is no difference in effect sizes between studies using COMP and studies using other forms of classroom management. (Please insert Table 2 here)

Conclusions:

Description of conclusions, recommendations, and limitations based on findings.

Whole-classroom, multi-component programs for classroom management have a significant, positive effect on decreasing problem behavior in the classroom. Students in the treatment classrooms in all 12 studies showed less disruptive, inappropriate, and aggressive behavior in the classroom compared to untreated students in the control classrooms where "treatment as usual" or typical classroom management practices were occurring. The overall mean classroom effect size of either .71 or .80 indicates a positive effect that significantly impacts the classroom environment. Teachers who use universal classroom management approaches can expect to experience improvements in student behavior, improvements that establish the context for effective instructional practices to occur.

The analysis of the effect sizes did not indicate a significant difference between effects sizes, indicating they were drawn from the same hypothetical distribution. Said another way, this means there were no systematic differences in the way the studies were conducted such as duration of treatment, assignment procedures, or population that may account for differences in effect sizes. Likewise, treatment characteristics did not have a significant impact on the overall mean classroom effect size, and there was no statistically significant difference between studies using COMP or other classroom management packages. Results will be discussed in terms of the

limitations of study features reported (e.g., treatment fidelity) and implications for research and practice.

Appendices

Not included in page count.

Appendix A. References

References are to be in APA version 6 format.

- Anderson, L. M., Evertson, C. M., & Emmer, E. T. (1979). *Dimensions in classroom management derived from recent research*. Research and Development Center for Teacher Education: TX. [ERIC Document Reproduction Service No. ED 166 193].
- Becker, W.C., Madsen, C.H., & Arnold C. (1967). The contingent use of teacher attention and praise in reducing classroom behavior problems. *Journal of Special Education, 1*, 287-307.
- Dolan, L. J., Kellam, S. G., Brown, C. H., Werthamer-Larsson, L., Rebok, G. W., Mayer, L. S., Laudolff, J., Turkkan, J. S., Ford, C., & Wheeler, L. (1993). The short-term impact of two classroom-based preventive interventions on aggressive and shy behaviors and poor achievement. *Journal of Applied Developmental Psychology, 14*, 317-345.
- Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational Psychologist, 36*, 103-112.
- Greer-Chase, M., Rhodes, W.A., & Kellam, S.G. (2002). Why the prevention of aggressive disruptive behaviors in middle school must begin in elementary school. *The Clearing House, 75*(5), 242-245.
- Hedges, L. (2007). Effect sizes in cluster-randomized designs. *Journal of Educational and Behavioral Statistics, 32*, 341-370.
- Hedges, L., & Olkin, I. (1985). *Statistical models for meta-analysis*. New York: Academic Press.
- Kounin, J. (1970). *Discipline and group management in classrooms*. New York: Holt, Rinehart & Winston.
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Thousand Oaks: Sage Publications.
- Madsen, C. H., Jr., Becker, W. C., & Thomas, D. R. (1968). Rules, praise, and ignoring: Elements of elementary classroom control. *Journal of Applied Behavior Analysis, 1*, 139-150.
- Rose, L. C., & Gallup, A. M. (2005). The 37th annual Phi Delta Kappa/Gallup poll of the public's attitudes toward the public schools. *Phi Delta Kappan, 87*(1), 41-57.
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children, 31*, 351-380.
- Wilson, D. B., Gottfredson, D. C., & Najaka, S. S. (2001). School-based prevention of problem behaviors: A meta-analysis. *Journal of Quantitative Criminology, 17*, 247-272.
- Wilson, S. J., & Lipsey, M. (2006). The effects of school-based information processing interventions on aggressive behavior: Part I universal programs. Center for Evaluation Research and Methodology. Nashville, TN: Vanderbilt University.
- Wilson, S. J., Lipsey, M. W., & Derzon, J. H. (2003). The effects of school-based intervention programs on aggressive behavior: A meta-analysis. *Journal of Consulting and Clinical Psychology, 71*, 136-149.

Appendix B. Tables and Figures

Not included in page count.

Table 1
Characteristics of Included Studies (n = 12)

Characteristic	N	%	Characteristic	N	%
<i>Publication Year</i>			<i>Grades of Participants</i>		
1980s	2	17	K-12	1	8
1990s	9	75	K-6 (+resource)	8	67
2000s	1	8	K-9	1	8
			6-12	2	17
<i>Form of Publication</i>			<i>Location of Treatment</i>		
Published (peer review)	5	42	Regular classroom	8	67
Technical report	7	58	Both regular and special	4	33
<i>Country of Study</i>			<i>Treatment Agent</i>		
United States	11	92	Regular education teacher	8	67
Netherlands	1	8	Both regular and special	4	33
<i>Group Assignment</i>			<i>Duration of Treatment</i>		
Random (individual)	7	58	1-10 weeks	1	8
Random (group)	4	33	11-20 weeks	1	8
Nonrandom	1	8	21-50 weeks	8	67
			>50 weeks	2	17
<i>Sample Size (Tx + Control)</i>			<i>Treatment Components</i>		
< 10	1	8	Teacher training in COMP	7	58
10 - 20	2	16	Good Behavior Game	2	17
21 - 30	8	67	Multi-component	3	24
31	1	8			
<i>School Setting</i>			<i>Additional Treatment Components</i>		
Public	10	84	Parent training	2	17
Public and Private	2	16	School structure changes	1	8
			Academic	1	8
			None	8	67
<i>School Neighborhood</i>					
Urban	1	8			
Mix (urban, suburban, rural)	10	84			
Unknown	1	8			

Note. Tx = Treatment; COMP = Classroom Organization and Management Program.

Table 2
Results of Effect Size Weighted Moderator Analysis for Treatment Characteristic

Variable	M	SE	95% CI		z	p
	Classroom ES		LL	UL		
Other	.88 (ICC=.05)	.29	.22	.41	6.36	.00
Other	.66 (ICC=.10)	.22	.23	1.10	3.01	.00
COMP	.75	.18	.40	1.10	4.23	.00

Note. COMP = Classroom Organization and Management Program; ES = effect size; ICC = intraclass correlation; CI = confidence interval; LL = lower limit; UL = upper limit.

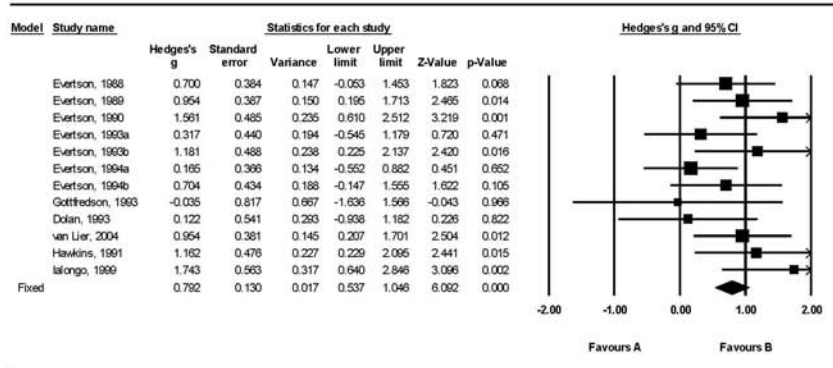


Figure 1. Forest plot for the effects of classroom management on disruptive or aggressive student behavior (ICC = .05). Homogeneity Analysis: $Q = 13.72$, $df = 11$, $p = .25$, and $I^2 = 19.83$

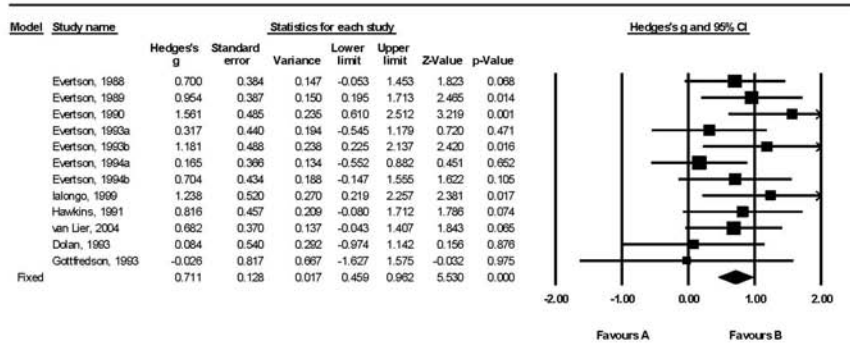


Figure 2. Forest plot for the effects of classroom management on disruptive or aggressive student behavior (ICC = .10). Homogeneity Analysis: $Q = 10.67$, $df = 11$, $p = .47$, and $I^2 = 0.00$