



Title Registration for a Systematic Review: Instructional Strategies for Enhancing Prosocial Behavior in Children and Youth: A Systematic Review and Meta-Analysis

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TITLE OF THE REVIEW

Instructional Strategies for Enhancing Prosocial Behavior in Children and Youth: A Systematic Review and Meta-Analysis

BACKGROUND

Prosocial behaviors are voluntary acts that serve to help or promote the wellbeing of others such as sharing, assisting others in need, comforting, cooperating, and protecting someone from harm (Eisenberg, Fabes, & Spinrad, 2006; Eisenberg & Mussen, 1989). The accumulating literature on prosocial behavior suggests its individual and interpersonal benefits for children from preschool to high school. It is linked to greater empathy, self-confidence, and antisocial impulse regulation, higher grades and educational aspirations, and more supportive relationships (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000; Eisenberg et al., 2006; Johnson, Beebe, Mortimer, & Snyder, 1998; Larrieu & Mussen, 1986; Markiewicz, Doyle, & Brendgen, 2001). There is also experimental evidence that suggests that prosocial behavior in adolescence may serve as a long-term protective factor. Studies show that youth involved in volunteering activities have lower rates of risky behavior, course failure, suspension from school, and school dropout as compared to controls (Allen, Philliber, Herrling, & Kuperminc, 1997; Moore & Allen, 1996). Taken together, such data suggest that identifying antecedents of prosocial behaviors may have far reaching implications for beneficial personal and collective outcomes.

The need to build prosocial competencies is underscored by studies that suggest high percentages of students lack skills to get along with others, work as part of group, or cooperatively resolve interpersonal disputes (Johnson & Johnson, 1996; Rimm-Kaufman, Pianta, & Cox, 2000). Of further concern, children from lower income homes lag further behind their more affluent peers in social skills (Child Trends, 2003). This is particularly worrisome considering the already pervasive school-related disadvantages associated with poverty (Lee & Burkam, 2002).

Identifying basic behavioral influence strategies that enhance prosocial behavior has significant and timely implications for school and classroom practice. Over the past decade, there has been a high level of interest in enhancing students' prosocial behavior through public education. Several U.S. states (e.g., Pennsylvania, Washington) have recently adopted learning standards for teaching prosocial competencies in early childhood and elementary education. In a new U.S. survey, over 90% of preschool to high school teachers report that prosocial behaviors such as helping and cooperation are teachable and should be part of in-school learning (CASEL, 2013). The Academic, Social, and Emotional Learning Act, a piece of legislation recently introduced to Congress, would allow the use of federal funds to support teacher training in practices that address students' positive social

development. However, inefficient progress and failures in school reform will likely result with the current absence of clear evidence-based indications of the instructional practices that lead to prosocial behavior.

Internationally, there also has been growing awareness of the importance of teaching and supporting prosocial behaviors via education. According to a recent report by the United Nations Educational, Scientific and Cultural Organization's (UNESCO) Center for Child Well-being, education should offer opportunities for all children and youth to master social competencies (LMTF, 2013). Ministries and agencies with national responsibility for education in various countries have proposed or mandated that schools introduce action plans and curricula to support students' prosocial behavior (e.g., Ministry of Education, Ontario, Canada; Ministry of Education, New Zealand; Mulyavardhan program, Maharashtra, India). Seemingly, the socialization of prosocial behavior can be perceived as a global educational issue.

Theoretical perspectives on prosocial development suggest that learning and enactment of prosocial behaviors are supported through adults guiding socialization practices and behavioral expectations. Moreover, when adults involve children in the actual experience of providing help, care, and other prosocial actions, children may be able to see the positive effects of their behavior as well as gain social approval: these intrinsic and social rewards may motivate future prosociability (Eisenberg et al., 2006; Staub, 2003). Prosocial behavior is also thought to be an adaptation to ecological characteristics in a particular context (Eisenberg, et al., 2006).

Perhaps the greatest limitation in the extant research on prosocial behavior is that it is primarily correlational and hence does not provide evidence-based directions for instructional practice. A body of experimental studies do, however, suggest that familial and non-familial adults can have positive impacts on children's prosocial behavior with techniques such as modeling, positive reinforcement, permissive instruction, empathic arousal, induction, moral exhortation, rehearsal, and assignment of social responsibility (e.g., Eisenberg & Mussen, 1989; Eisenberg et al., 2006; Hastings, Utendale, & Sullivan, 2007). Yet, overall, this research has yielded indeterminate, mixed results. A meta-analysis would provide methodological rigor by quantitatively summarizing accumulated data on this topic to resolve inconsistencies in the literature and also address questions of how much, under what conditions, and for whom different types of instructional practices effectively enhance prosocial behavior.

The primary focus of this systematic review and meta-analysis will be to address vital questions of whether the extant literature indicates that instructional strategies effectively prompt children to act in ways that help and benefit others and which specific types of instructional strategies are most effective toward this aim. The work will summarize the published and unpublished experimental and high quality quasi-

experimental studies on the impacts of various instructional techniques on the prosocial behavior of children and youth. Particular emphasis will be on clarifying effective techniques that teachers and other adults can use in their daily interactions with children and adolescents to promote prosocial behavior. Several researchers speak to the benefits of identifying experimentally validated instructional strategies that directly engage students in the learning process. It has been argued that evidence-based *kernels*, or proven small units of behavioral influence, could add value to or even be more efficient than comprehensive interventions that enhance social competencies. In schools, for instance, evidence-based *kernels* could offer advantages of teachable moments, cost and time efficiency, consistency of reinforcement, and continuity across the curriculum, grade levels, and behavioral goals and be used to construct improved adaptations of school interventions (Embry & Biglan, 2008; Jones & Bouffard, 2012).

This quantitative review is expected to provide information that can guide future research and fields of application. The expected outputs of the proposed meta-analysis would be both valuable and practical in providing educators, school systems, researchers, and policy-makers with knowledge of effective instructional strategies that show promise across studies for promoting prosocial behaviors and could be flexibly integrated into daily practices in classrooms and other contexts. This research synthesis may be the needed groundwork to advance widespread dissemination of instructional strategies that increase the prosociability of children and youth. The review may also provide a foundation for efficacy trials of whether the evidence-based instructional strategies, highlighted by the meta-analysis, when taken to scale in classrooms and other settings effectively produce behavioral changes. The benefits of prosocial behavior to lives of children and youth have been highlighted in the last few decades, and this quantitative synthesis of the research may take us a step closer to understanding how to support these constructive, caring, and helpful behaviors in interactions, relationships, schools, and communities.

OBJECTIVES

The primary objectives of the quantitative review are as follows:

- Provide a descriptive summary of the current state of the literature and highlight gaps in the research;
- Assess the magnitude of the effects and variability of the effects of teachers' and other adults' instructional strategies on the prosocial behavior of children and youth;
- Explore the distinguishing characteristics of the more and less effective instructional strategies (i.e., strategy type, format, setting, and duration);
- Explore the relationship between the effects of instructional practices and sample participant characteristics of age, gender, ethnicity/race, family SES, and baseline levels of prosocial behavior;

- Explore the association of characteristics of the socializer of prosocial behavior (i.e., gender, relationship to participant) with the effectiveness of instructional strategies on prosocial behavior;
- Examine whether overall the instructional strategies show longer-term effects on prosocial behavior and which specific types of instructional strategies show longer-term effects.

EXISTING REVIEWS

Two major conclusions come from prior meta-analyses in related areas. The first is that exposure to prosocial television programming can significantly increase children's prosocial behavior (Hearold, 1986; Mares & Woodard, 2005). The second conclusion is that both multicomponent social and emotional learning programs in schools and after-school programs with a focus on development of personal and/or social skills can effectively increase positive social behavior of children and adolescents (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Durlak, Weissberg, & Pachan, 2010).

A key goal of research should be to assist practitioners. Currently, no quantitative synthesis of the research has been conducted to underscore best basic teaching practices for enhancing prosocial behaviors of children and youth (or, for that matter, other areas of positive social and emotional development). That said, the literature on prosocial behavior is ripe for a meta-analysis that examines whether instructional strategies that have been designed to increase prosocial behavior of children and youth are effective and also examines which characteristics of instructional strategies and participants are associated with meaningful and/or sustained effects on prosocial behavior.

INTERVENTION

For eligibility in this review, a study must investigate the effects of one or more specific instructional practices aimed at increasing children's prosocial behavior. Eligible strategies involve any actions performed with the expectation that they will have beneficial effects on prosocial behavior. Examples of instructional practices include but are not limited to positive reinforcement, direct instruction, permissive instruction, induction, reasoning, modeling, empathy arousing techniques, emotional socialization, moral exhortation, practice or rehearsal of prosocial behavior, external reward, socializer nurturance or emotional warmth, and assignment of social responsibility. Instructional practices may occur in a single short-term exposure or be implemented over a longer-term (e.g., over a school year). The instructional practices can be studied in isolation or in combination with other instructional strategies. However, multicomponent, cooperative learning, or media interventions are ineligible. For inclusion in this review, the instructional strategy has to be delivered by a teacher, parent, or other adult (e.g., researcher, research

assistant, graduate student, teaching assistant, school psychologist). In addition, eligible studies must include a comparison condition. Eligible comparison conditions are defined as no treatment, treatment as usual, placebo treatment, or any other similar condition set up as a contrast to the treatment condition that should not have an impact on prosocial behavior.

POPULATION

The proposed review will include studies with participants ages 3 to 18. This age range was selected to capture the broad developmental stages of early childhood through adolescence. The specific age range was also selected to correspond to the ages of students in preschool through the end of secondary school, as one of the objectives of the review is to provide relevant evidence-based indications of instructional strategies that can be used in a practical way in education to enhance student prosocial behavior. In addition, theory and research suggest that both childhood and adolescence are significant developmental periods to enhance prosocial behavior. It may be of great consequence to foster an early direction toward helping others because prosocial acts in childhood predict prosocial actions in adulthood (Eisenberg et al., 1999). Adolescence may also be a salient period to influence prosocial development (Lerner & Steinberg, 2004). Since the study samples will span early childhood through adolescent developmental periods, age will be examined as a key moderator of the effects of instructional strategies on prosocial behavior.

The distribution of subjects by gender and ethnic/racial group will be representative of the literature on the effects of adults' instructional strategies on the prosocial behavior of children and youth. There are no exclusion criteria based on participant demographic characteristics. However, studies are ineligible for review if they are primarily composed of populations with learning impairments or of populations in clinical or incarcerated settings. In addition, studies may have been conducted in any country but must be reported in English.

OUTCOME

The outcome to be examined in this systematic review and meta-analysis is prosocial behavior. Prosocial behavior represents a broad category of voluntary acts that serve to help or promote the wellbeing of others (Eisenberg & Mussen, 1989). Sharing resources, providing assistance, volunteering, donating, comforting, cooperating, and protecting someone from harm are common examples of prosocial behavior.

Studies with outcomes such as friendliness, empathy, sympathy, peer acceptance, popularity, antisocial impulse regulation, and other indices of social and emotional competence will be excluded from this review (if the studies do not also include a measure of prosocial behavior), as such outcomes do not specifically address the focus on prosocial behavior. It should be noted that although prosocial behavior is

commonly included as part of measures of social competence, studies suggest that prosocial behavior and social competence are not conceptually or empirically redundant (Cassidy, Werner, Rourke, & Zubernis, 2003; Eisenberg et al., 1996; Eisenberg et al., 2006).

METHODOLOGY

In order to be included in this systematic review and meta-analysis, a study has to meet the following criteria:

Study Design

Studies must use an experimental or quasi-experimental design that compares subject groups receiving one (or more) identifiable treatment(s) (i.e., exposure to instructional strategy or combination of instructional strategies designed to increase prosocial behavior) with one (or more) comparison condition(s).

Comparison/control conditions may be no treatment, treatment as usual, placebo treatment, or any other similar condition set up as a contrast to the treatment condition that should not have an impact on prosocial behavior. If a quasi-experimental design was used, a pre-treatment measure of prosocial behavior must be reported for both treatment or control groups, or the study must a) use a pre-intervention measure of prosocial behavior to adjust for treatment/control groups' initial differences in prosocial behavior or b) match participants in the treatment and control groups on variables that include at least one qualifying measure of prosocial behavior taken prior to treatment.

Population

Studies must involve participants ages 3 to 18 (as described in the population section).

Intervention

Studies must investigate the effects of one or more specific adult instructional practices aimed at increasing children's prosocial behavior (as described in the intervention section). Studies are ineligible if instructional strategies are implemented by children or siblings.

Type of Data

The study has to quantitatively report the outcome of prosocial behavior in such a way that the effect of a teaching practice or a combination of teaching practices on the prosocial behavior of both the treatment and control groups can be compared.

Outcome

The outcome of prosocial behavior will be examined (as described in the outcome

section). There are no restrictions on the type of measure of prosocial behavior (e.g., observational measure, teacher report, peer report) or the time frame that measures of prosocial behavior were collected following treatment.

Outcome Follow-ups

All follow-up measures of prosocial behavior collected on both treatment and comparison group samples will be included. It is an objective of this review to provide information on whether extant instructional strategies show evidence of longer-term effects and which specific instructional strategies show longer-term effects.

Settings

Strategies can occur in classrooms, research laboratories, afterschool programs, home settings, and all other environments except clinical or incarcerated settings.

Geography

Studies may have been conducted in any country. Social behaviors and relational processes may dynamically interplay with culture (LeVine et al., 1994; Weisner, Gallimore, & Jordan, 1988), so broad cross-cultural comparability may be problematic. Consequently, the country of origin in which the research was conducted will be examined as a covariate in analysis.

Publication Language

Studies must be reported in English. The choice to exclude studies from non-English language sources reflects the practical constraints in translating literature not reported in English.

Time Period

The date of publication must be 1960 or later. Study of the effects on children's prosocial behavior began predominantly in the 1960's and 70's, mainly in the U.S., Canada, and Western Europe, when there was great interest in experimental work testing whether unfamiliar adults' actions could induce changes in children's prosocial responding. Social and psychological research on prosocial behavior rapidly accelerated in 1964 when the brutal stabbing of Katherine "Kitty" Genovese outside her apartment in Queens, New York while 38 neighbors and other witnesses did not assist or contact the police, was highly publicized and ignited social scientists' exploration into reasons for why individuals act in ways that help others (Penner, Dovidio, Piliavin, & Schroeder, 2005).

Note: Authors of reports will be contacted if sufficient information is not reported to describe the participant sample, calculate effect sizes, or code selected moderators.

REFERENCES

- Allen, J. P., Philliber, S., Herrling, S., & Kuperminc, G. P. (1997). Preventing teen pregnancy and academic failure: Experimental evaluation of a developmentally based approach. *Child Development, 64*, 729-742.
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science, 11*, 302–306.
- Cassidy, K. W., Werner, R. S., Rourke, M., Zubernis, L. S. & Balaraman, G. (2003). The relationship between psychological understanding and positive social behavior. *Social Development, 12*, 198-221.
- Child Trends. (2003). *Attending kindergarten and already behind: A statistical portrait of vulnerable young children*. Washington, DC: Child Trends. Retrieved from <http://www.childtrends.org/wp-content/uploads/2003/01/Fatherhood-DADS-Survey-Framework.pdf>
- Collaborative for Academic, Social, and Emotional Learning (CASEL). (2013). *2013 CASEL guide: Effective social and emotional learning programs*. Retrieved from <http://casel.org/guide>
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405-432.
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology, 45*, 294–309.
- Eisenberg, N., Fabes, R. A., Karbon, M., Murphy, B. C., Wosinski, M., Polazzi, L., ... Juhnke, C. (1996). The relations of children's dispositional prosocial behavior to emotionality, regulation, and social functioning. *Child Development, 67*, 974-992.
- Eisenberg, N., Fabes, R., & Spinrad, T. (2006). Prosocial development. In W. Damon, & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 646–718). New York, NY: Wiley.
- Eisenberg, N., Guthrie, I. K., Murphy, B. C., Shepard, S. A., Cumberland, A., & Carlo, G. (1999). Consistency and development of prosocial dispositions: A longitudinal study. *Child Development, 70*, 1360-1372.
- Eisenberg, N., & Mussen, P. (1989). *The roots of prosocial behavior in children*.

Cambridge: Cambridge University Press.

- Embry, D. D., & Biglan, A. (2008). Evidence-based kernels: Fundamental units of behavioral influence. *Clinical Child & Family Psychology Review, 11*, 75-113.
- Hastings, P. D., Utendale, W. T., & Sullivan, C. (2007). The socialization of prosocial development. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization* (pp. 638–664). New York: Guilford Press.
- Hearold, S. (1986). A synthesis of 1,043 effects of television on social behavior. In G. Comstock (Ed.), *Public communication and behavior: Vol. 1* (pp.66-135). New York: Academic Press.
- Johnson, M. K., Beebe, T., Mortimer, J. T., & Snyder, M. (1998). Volunteerism in adolescence: A process perspective. *Journal of Research on Adolescence, 8*, 309-322.
- Johnson, D. W., & Johnson, R. (1996). Conflict resolution and peer mediation programs in elementary and secondary schools: A review of the research. *Review of Educational Research, 66*, 459-506.
- Jones, S. M., & Bouffard, S. M. (2012). Social and emotional learning in schools: From programs to strategies (Social Policy Report). *Sharing Child and Youth Development Knowledge, 26*(4), 3–22.
- Larrieu, J., & Mussen, P. (1986). Some personality and motivational correlates of children's prosocial behavior. *Journal of Genetic Psychology, 147*, 529–542.
- Lee, V. E., & Burkam, D. T. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute.
- Lerner, R. M., & Steinberg, L. (Eds.). (2004). *Handbook of adolescent psychology* (2nd ed.). Hoboken, NJ: John Wiley & Sons Inc.
- LMTF (Learning Metrics Task Force). (2013). *Toward universal learning: Recommendations from the Learning Metrics Task Force*. Montreal and Washington, D. C.: UNESCO Institute for Statistics and Center for Universal Education at the Brookings Institution.
- LeVine, R. A., Dixon, S., LeVine, S., Richman, A., Leiderman, P. H., Keefer, C. H., & Brazelton, T.B. (1994). *Child care and culture: Lessons from Africa*. Cambridge: Cambridge University Press.
- Mares, M. L., & Woodard, E. (2005). Positive effects of television on children's social interactions: A meta-analysis. *Media Psychology, 7*, 301–322.
- Markiewicz, D., Doyle, A. B., & Brendgen, M. (2001). The quality of adolescents'

friendships: Associations with mothers' interpersonal relationships, attachments to parents and friends, and prosocial behaviors. *Journal of Adolescence*, 24, 429-445.

Moore, C. W., & Allen, J. P. (1996). The effects of volunteering on the young volunteer. *Journal of Primary Prevention*, 17, 231-258.

Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, 56, 365-392.

Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15, 147-166.

Staub, E. (2003). *The psychology of good and evil: Why children, adults, and groups help and harm others*. New York, NY: Cambridge University Press.

Weisner, T. S., Gallimore, R., & Jordan, C. (1988). Unpackaging cultural effects on classroom learning: Hawaiian peer assistance and child-generated activity. *Anthropology & Education Quarterly*, 19, 327-353.

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ROLES AND RESPONSIBILITIES

Content: Asha Spivak will lead on the overall content of the review and take responsibility for the integrity of the work as a whole. The study of prosocial behavior has been Asha Spivak's primary substantive area of focus in master's and doctoral degree work and published research.

Dale Farran, Professor at the Peabody College of Education and Human Development and Senior Associate Director of the Peabody Research Institute at Vanderbilt University, has been involved in research and intervention for at-risk children and youth for all of her professional career. With Dale Farran's expertise in areas of early childhood education, early intervention, curriculum evaluation, and socialization and cognitive development, she will bring considerable content knowledge of the literature and its practical applications and implications.

Systematic review methods, statistical analysis, & information retrieval:

Mark Lipsey, Director of the Peabody Research Institute and Research Professor at the Peabody College of Education and Human Development at Vanderbilt University, and Joshua Polanin, managing editor of the Method's Group and Chair of the Statistical Methods subgroup at the Campbell Collaboration and an Institute of Education Sciences postdoctoral fellow at Vanderbilt University, are highly expert in rigorous approaches to systematic review, meta-analysis, and systematic information retrieval. With consultation and oversight from Mark Lipsey and Joshua Polanin, the systematic review, statistical analysis, and information retrieval will be conducted by Asha Spivak. Asha Spivak has training in systematic review, meta-analysis, and systematic information retrieval through participation in an

advanced graduate-level course on applied meta-analysis. Two extensively trained research assistants will also participate in the information retrieval, eligibility selection, and coding of research reports. In addition, the head social sciences librarian of the Jean and Alexander Heard Libraries at Vanderbilt University will be consulted regarding the search strategy in order to identify other databases or sources to search for relevant research reports.

FUNDING

Asha Spivak is an Institute of Education Sciences (IES) postdoctoral fellow and has IES funds that can be used for research purposes. The monies will be used as needed to fund two research assistants, well versed in quantitative statistics, and train them to rigorously conduct research report searching and coding. No additional external funding will be sought to support the proposed systematic review or meta-analysis.

POTENTIAL CONFLICTS OF INTEREST

There are no known conflicts of interest. Although Joshua Polanin is a managing editor of the Method's Group and Chair of the Statistical methods subgroup at the Campbell Collaboration, he will not participate in any aspect of the peer review process for this submission.

REQUEST SUPPORT

The review team will be able to support the conduct of a high-quality, rigorous systematic review and meta-analysis. No additional support is requested.

PRELIMINARY TIMEFRAME

Approximate submission date for draft protocol: January 2014

Approximate submission date for draft review: December 2014

AUTHOR DECLARATION

Authors' responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

Publication in the Campbell Library

The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review, and subsequent updates in the Campbell Library. The Campbell Collaboration places no restrictions on publication of the findings of a Campbell systematic review in a more abbreviated form as a journal article either before or after the publication of the monograph version in *Campbell Systematic Reviews*. Some journals, however, have restrictions that preclude publication of findings that have been, or will be, reported elsewhere and authors considering publication in such a journal should be aware of possible conflict with publication of the monograph version in *Campbell Systematic Reviews*. Publication in a journal after publication or in press status in *Campbell Systematic Reviews* should acknowledge the Campbell version and include a citation to it. Note that systematic reviews published in *Campbell Systematic Reviews* and co-registered with the Cochrane Collaboration may have additional requirements or restrictions for co-publication. Review authors accept responsibility for meeting any co-publication requirements.

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