BRIEF REPORTS

Transracial, Same-Race Adoptions, and the Need for Multiple Measures of Adolescent Adjustment

Anthony L. Burrow, MS, and Gordon E. Finley, PhD
Florida International University

Using a multimeasure approach, the current study investigated 12 indices of academic, familial, psychological, and health outcomes for 4 groups of transracial and same-race adopted adolescents. A secondary analysis of the National Longitudinal Study of Adolescent Health data showed that Asian adolescents adopted by White parents had both the highest grades and the highest levels of psychosomatic symptoms, whereas Black adolescents adopted by Black parents reported the highest levels of depression. Intriguingly, and by contrast, Black adoptees reported higher levels of self-worth than non-Black adoptees. The implications of the findings for future investigations of transracial adoption are discussed.
Also fueling the controversy over the efficacy of TRA are the value-laden dependent outcomes investigated (Burrow & Finley, 2001; Finley, 2002). Although some scholars maintain that the sound racial identity and self-esteem of adoptees are paramount to developmental outcomes, others have argued that additional domains such as academic performance, familial relationships, and problem behaviors are equally important (e.g., Courtney, 1997; Hayes, 1993). Accordingly, empirical investigations incorporating comprehensive measures of adjustment and using diverse comparison groups are necessary to resolve the existing controversy (Finley, 1999). Therefore, integrating a multimeasure approach to TRA research offers stakeholders a much more meaningful perspective by providing a more complete picture of the full range of possible outcomes (Finley, 1998). Results of multioutcome investigations have significant implications for academic researchers, child placement organizations, potential adoptive families, and individuals awaiting adoption who are concerned with “the best interest of the child” (Finley, 2002).

The aim of the current study is to investigate multiple indexes of adoption outcomes by different combinations of parent–child racial groupings for adopted adolescents. The results from such an investigation can be examined with an eye toward evaluating the extent to which multimeasure approaches contribute to the existing knowledge regarding the relationships among adoption, race, and adjustment outcomes during adolescence. Simultaneously investigating multiple indexes of adjustment may yield more compelling insights for TRA stakeholders than those gained from empirical research focused on singular domains of adjustment. Furthermore, using a nationally collected data set of adolescents provides a unique opportunity to investigate the adjustment of adoptees across many locales, which will enhance the generalizability of the findings.

**Method**

**Description of Data**

The current study was based on a secondary analysis of the Wave I in-home interview of the National Longitudinal Study of Adolescent Health (Add Health), a school-based study of the health-related behaviors of adolescents in Grades 7 to 12 funded by the National Institute of Child Health and Human Development and 17 other federal agencies. The in-home interviews were conducted between April and December 1995 using computers provided by interviewers to facilitate confidentiality. Some of the topics covered by the in-home interview were health status, health facility utilization, peer networks, family composition and dynamics, educational aspirations and expectations, employment experience, sexual partnerships, substance use, and criminal activities.

**Participants and Measures**

Participants who were administered the Add Health in-home questionnaire (N = 20,745) ranged in age from 12 to 19 years. Because there were inconsistencies concerning the accuracy of reported adoption statuses of participants, we use the careful analyses of Miller et al. (2001), which identified the true group of adoptees (n = 609) in the Add Health sample.

**Independent variables.** Each independent variable used in the current study was derived using the selected 609 adoptees. However, because of missing data for the dependent measures, the valid sample size is reduced for most analyses. The major independent variable consisted of four specific child–parent racial groupings: White adolescents adopted by White parents (n = 350), Black adolescents adopted by Black parents (n = 74), Black adolescents adopted by White parents (n = 8), and Asian adolescents adopted by White parents (n = 24). Two further exploratory independent variables also were used. First, same-race adoptee versus transracial adoptee analyses compared all same-race adoptees (i.e., White adolescents adopted by White parents and Black adolescents adopted by Black parents; n = 424) to all transracial adoptees (i.e., Black adolescents adopted White parents and Asian adolescents adopted by White parents; n = 32). Second, Black adoptee versus non-Black adoptee analyses compared all Black adoptees (i.e., both Black adolescents adopted by White parents and Black adolescents adopted by Black parents; n = 82) with the all non-Black adoptees (i.e., White adolescents adopted White parents and Asian adolescents adopted by White parents; n = 374) for one outcome variable: self-worth.

**Dependent variables.** The academic, familial relationships, depression, and self-worth scales used in this study were obtained from the Minnesota Adoption Project Team (H. Grotevant, M. van Dulmen, N. Dunbar, & E. Kouneski, personal communication, February 6, 2002). The delinquency and physical health measures were constructed for this study. The measures are described next.

**Academics.** To measure academic functioning, school grades, school connectedness, learning problems, and academic expectations scales were used. The school grades scale (α = .76) averaged participants’ reported grades received in English or language arts, mathematics, history or social studies, and science. Each item was scored from A (1) to D or lower (4). The school connectedness (α = .73) and learning problems (α = .67) scales were composed of multiple items rated on 5-point Likert-type scales. In addition, the academic expectations scale (α = .82) averaged the response ratings of two items: “How much do you want to go to college?” and “How likely is it that you will go to college?” Each item was rated on a scale ranging from 1 (low) to 5 (high).
Familial relationships. Participants’ familial relationships were measured by three independent scales composed of five items each assessing ratings for mother closeness ($\alpha = .86$), father closeness ($\alpha = .89$), and overall family closeness ($\alpha = .75$). Participants were asked to rate each item on 5-point Likert-type scales.

Psychological adjustment. Psychological adjustment was measured by indices of depression, self-worth, and delinquent behaviors. The depression scale ($\alpha = .78$) averaged the total counts of 19 items that probed how adolescents felt. Each item was rated on a scale ranging from never or rarely (1) to all of the time (5). Examples include, “You felt depressed,” “You felt lonely,” and “You felt like life was not worth living.” The self-worth scale ($\alpha = .79$) averaged the ratings of four items (e.g., “You have a lot of good qualities,” “You have a lot to be proud of”). Each item was rated from strongly agree (1) to strongly disagree (5). Finally, a delinquent behavior scale was created using six items taken from the Delinquency Scale of the Add Health in-home interview, which asked whether or not adolescents had participated in certain delinquent behaviors during the past 12 months. The “yes” responses to the six items were summed to compute a total delinquency score for each participant.

Physical health. Two variables were constructed. Overall health was measured using the general health question administered on the Add Health interview, “In general, how is your health?” This item was rated from very good (1) to poor (4). In addition, by taking the average of frequency ratings for 14 psychosomatic conditions, which were appropriate for both males and females, a scale ($\alpha = .79$) was constructed. Sample items included “How often have you had a headache?” “How often have you had chest pains?” and “How often have you had cold sweats?” Each item was rated from never (1) to every day (5).

Analytic Plan

All 12 outcome variables in the current study were analyzed using one-way analyses of variances (ANOVA). Also, effect sizes and the observed power were calculated for each analysis. The Scheffe test was used for pairwise comparisons among the four specific racial groupings when group means were compared in post hoc tests. In addition, the Type III method for calculating sums of squares when cell sizes differ was used. All tests conducted throughout the study were considered significant at $p < .05$.

Results

Each table reports the sample sizes, means, standard deviations, effect sizes, and results of the significance tests for all measures investigated for the four specific racial groupings.

Academic Measures

The one-way ANOVA for school grades indicated a significant difference among the means for the four specific racial groupings, $F(3, 338) = 5.25, p < .01$. Asian children adopted by White parents ($M = 1.72, SD = .59$) had significantly higher grades than both White children adopted by White parents ($M = 2.25, SD = .77$) and Black children adopted by Black parents ($M = 2.47, SD = .70$). In addition, the one-way ANOVA for academic expectations approached significance, $F(3, 450) = 1.83, p = .14$. Examination of this measure showed that Asian adolescents adopted by White parents ($M = 4.75, SE = .42$) had the highest academic expectations followed by Black adolescents adopted by White parents ($M = 4.63, SE = .98$) and by Black adolescents adopted by Black parents ($M = 4.39, SE = .52$) and finally by White adolescents adopted by White parents, who reported the lowest academic expectations ($M = 4.31, SE = .99$). Inspection of the means suggested that higher level exploratory analyses were warranted. These exploratory comparisons (see Table 2 for ANOVA results) revealed significant differences among same-race versus transracial adoptees for school grades, $F(1, 340) = 4.35, p < .05$, and academic expectations, $F(1, 452) = 5.05, p < .05$. Transracial adoptees had higher school grades ($M = 1.96, SD = .77$) than same-race adoptees ($M = 2.29, SD = .76$) and higher academic expectations ($M = 4.72, SD = .46$) than same-race adoptees ($M = 4.32, SD = .98$). None of the other academic measures yielded statistically significant results.

Familial Relationships

Three one-way ANOVAs were conducted to determine the effects of the four specific racial groupings on perceptions of mother closeness, father closeness, and family closeness. No significant differences were found for any of these measures among the four specific racial groupings. However, an exploratory analysis based on an inspection of the means in Table 1 suggested that perceptions of father closeness by same-race versus transracial adoptee comparisons might be warranted. Table 2 shows that the one-way ANOVA yielded a near-significant result, $F(1, 356) = 2.77, p = .10$. A breakdown of this measure by group showed that same-race adoptees ($M = 4.36, SD = .73$) manifested closer relationships with their fathers than did transracial adoptees ($M = 4.10, SD = .99$). No other significant familial relationship variables were found.

Psychological Adjustment

Three one-way ANOVAs were conducted to determine the effect of the four specific racial groupings on adolescents’ reports of depression, delinquency,
Table 1

Sample Size, Means, Standard Deviations, and Significance Tests by Specific Racial Groupings for All Adjustment Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>W–W</th>
<th>B–B</th>
<th>B–W</th>
<th>A–W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>School grades</td>
<td>255</td>
<td>2.25a</td>
<td>0.77</td>
<td>63</td>
</tr>
<tr>
<td>Learning problems</td>
<td>344</td>
<td>1.12</td>
<td>0.71</td>
<td>74</td>
</tr>
<tr>
<td>School connectedness</td>
<td>343</td>
<td>2.28</td>
<td>0.72</td>
<td>74</td>
</tr>
<tr>
<td>Academic expectations</td>
<td>348</td>
<td>4.31</td>
<td>1.00</td>
<td>74</td>
</tr>
<tr>
<td>Mother-closeness</td>
<td>336</td>
<td>4.35</td>
<td>0.71</td>
<td>69</td>
</tr>
<tr>
<td>Father-closeness</td>
<td>292</td>
<td>4.37</td>
<td>0.73</td>
<td>43</td>
</tr>
<tr>
<td>Family-closeness</td>
<td>345</td>
<td>3.93</td>
<td>0.70</td>
<td>74</td>
</tr>
<tr>
<td>Depression</td>
<td>350</td>
<td>0.57a</td>
<td>0.39</td>
<td>73</td>
</tr>
<tr>
<td>Delinquency</td>
<td>346</td>
<td>0.20</td>
<td>0.19</td>
<td>74</td>
</tr>
<tr>
<td>Self-worth</td>
<td>350</td>
<td>1.96</td>
<td>0.68</td>
<td>74</td>
</tr>
<tr>
<td>Overall physical health</td>
<td>350</td>
<td>2.05</td>
<td>0.87</td>
<td>74</td>
</tr>
<tr>
<td>Psychosomatic conditions</td>
<td>350</td>
<td>0.83</td>
<td>0.42</td>
<td>74</td>
</tr>
</tbody>
</table>

Note. Lower scores indicate better grades, fewer learning problems, less school connectedness, lower academic expectations, more distant familial relationship outcomes, less depression, less delinquency, higher self-worth, and positive physical health outcomes. Means in a row with different subscripts are significantly different from each other using Bonferroni, *p < .05. W = White; B = Black; A = Asian.

*p < .05. **p < .01.
and self-worth. The one-way ANOVA for depression indicated a significant difference in the means among the four groups, \( F(3, 450) = 3.18, p < .05 \). Black children adopted by Black parents (\( M = .73, SD = .45 \)) had significantly higher levels of depression compared with White children adopted by White parents (\( M = .57, SD = .39 \)). In addition, the one-way ANOVA for self-worth by the four specific racial groupings approached significance, \( F(3, 452) = 1.81, p = .14 \). Intriguingly, an examination of this measure showed that Black adolescents adopted by White parents (\( M = 1.78, SD = .65 \)) manifested the highest levels of self-worth, which was virtually identical to the mean for Black adolescents adopted by Black parents (\( M = 1.79, SD = .55 \)), followed by White adolescents adopted by White parents (\( M = 1.96, SD = .68 \)), and then by Asian adolescents adopted by White parents (\( M = 2.07, SD = .55 \)).

Given these means, a second exploratory analysis of self-worth (see Table 3 for ANOVA results) comparing all Black adoptees to all non-Black adoptees revealed a significant one-way ANOVA, \( F(1, 454) = 4.77, p < .05 \). Black adoptees of both White and Black parents (\( M = 1.79, SD = .56 \)) had higher perceptions of self-worth than did the White and Asian adoptees of White parents (\( M = 1.97, SD = .67 \)). No significant group differences were found for measures of delinquency.

## Physical Health

Two one-way ANOVAs were conducted to determine the effects of four specific adoptive parent–child racial groupings on adolescents’ overall physical health and psychosomatic conditions. No significant group differences were found for overall physical health. However, the one-way ANOVA for psychosomatic conditions indicated significant mean differences among the four specific racial groupings, \( F(4, 452) = 2.79, p < .05 \). Asian children adopted by White parents (\( M = .99, SD = .34 \)) reported significantly more psychosomatic conditions than Black children adopted by Black parents (\( M = .73, SD = .37 \)). A survey of the means prompted higher level exploratory analyses. These exploratory comparisons (see Table 2 for ANOVA results) indicated that differences in psychosomatic condition ratings among same-race versus transracial adoptees approached significance, \( F(1, 454) = 3.34, p = .07 \). Transracial adoptees (\( M = .96, SD = .43 \)) reported more psychosomatic symptoms than same-race adoptees (\( M = .82, SD = .42 \)). No other significant group differences were detected.

## Discussion

Using a multimeasure approach, the current study found that transracial adoptees fare sometimes better,
sometimes worse, but, on balance, about the same as their same-race adopted counterparts across the 12 adjustment measures investigated. Direct comparisons of all same-race adoptees to all transracial adoptees revealed significant group differences for 2 of the 12 outcomes, whereas 2 additional outcomes were found to approach significance. Specifically, transracial adoptees had significantly higher grades and significantly higher academic expectations but marginally more distant father relationships and higher levels of psychosomatic symptoms than their same-race adopted counterparts. The remaining measures yielded no significant group differences between same-race adoptees and transracial adoptees. The extent to which these findings can be generalized to all types of TRA, however, is qualified by the fact that most of the transracial adoptees in the current study were Asian adolescents adopted by White parents, with only a very small number of Black adolescents adopted by White parents.

Although small sample sizes deem many of the findings exploratory, some interesting differences were detected among the four specific racial groupings, as shown in Table 1. Specifically, the academic performance results show that Asian children adopted by White parents reported higher grades in school than same-race adopted White and Black children. Also, near-significant findings suggest that Asian children adopted by White parents reported the highest levels of academic expectations. These findings may suggest a racial or cultural expectation held by White adoptive parents that Asian children are inherently academically inclined and, therefore, reinforce such values and behaviors in their children. The positive valence of these findings, however, must be qualified by measures of physical health, which revealed that Asian children adopted by White parents also reported the greatest number of psychosomatic complaints. It may be that success in the areas in which Asian children adopted by White parents are flourishing comes at the expense of their physical health. In addition, transracially adopted Asian and Black adolescents reported marginally lower levels of perceived father closeness than their same-race adopted counterparts.

The most striking finding, however, was that Black children adopted by Black parents reported significantly higher levels of depression than White children adopted by White parents. By contrast, exploratory analyses showed that Black children adopted by either Black parents or White parents had the highest levels of self-worth compared with White and Asian children adopted by White parents. Because depression and self-worth both are commonly characterized as “internalizing” dimensions of personality, these incongruent findings warrant further investigation.

**Limitations**

First, two of the four key comparison groups examined in the current study had very small sample sizes, which may have reduced the statistical power necessary to detect reliable group differences. Furthermore, all calculations for effect sizes were below the cutoff for small as suggested by Cohen (1988). Second, and also because of small sample sizes, it was not possible to investigate age or gender effects within each of the four groups. Incorporation of such variables may have shed light on the interpretations of outcomes (Burrow, 2002). In addition, increased information on the participants of this study—not possible through the existing data in the Add Health data set—may help to better identify fine-grained groups of transracially adopted adolescents in the future. Third, and most critically for our proposed multimeasure approach, the Add Health data set did not contain any measures of racial identity. To resolve the longstanding TRA controversy, measures of racial identity, such as Afri-centric measures for transracially adopted Black children (Park & Green, 2000), must be included to assess the full range of potentially important outcomes.

**Directions for Future Research**

Supported by the findings of this study, multimeasure approaches are necessary to provide the most meaningful and thorough evaluation of developmental outcomes for transracially adopted adolescents. Investigating multiple domains relevant to adolescent adjustment will help to uncover those domains in which, in comparison to same-race adoptees, transracial adoptees fare better, fare worse, or simply fare the same.

**References**


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