The Influence of Adoption on Self-Related Social-Emotional Characteristics of Adopted Children and Adolescents

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THE INFLUENCE OF ADOPTION ON SELF-RELATED SOCIAL-EMOTIONAL CHARACTERISTICS OF ADOPTED CHILDREN AND ADOLESCENTS

by

H. Norman Ames

Plan B Paper submitted in partial fulfillment of the requirements for a Master's degree in Psychology

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UTAH STATE UNIVERSITY
Logan, Utah
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Introduction

Many families in our society have been created through adoption. In 1990, there were approximately 119,000 adoption placements in the United States (Flango & Flango, 1990). Over the past decade, the majority of adoptions were infants placed with White couples who ranged in age from 25 to 34 (Bachrach, Adams, Sambrano, & London, 1990).

Although adoptions are frequent, and despite adoption's long history in many societies, only recently has its effect on children been a point of scientific interest. Historically, the practice of adoption primarily served the needs of adoptive parents -that is, to "supply" children to parents who otherwise were not able to have children of their own. Although not totally ignored, the needs of adoptees and birthparents were largely neglected. In the 1950s and 1960s, major changes in the general philosophy of adoption began to occur directing more attention to the needs of adoptees and birthparents (Shapiro, 1956). Current adoption placement theories now maintain that primary consideration should be given to the adoptee, making every effort to ensure their physical and emotional well-being.

This change in thinking has stimulated much debate regarding the basic question of whether adopted children are at increased risk psychologically in some way as compared to their non-adopted peers (Brodzinsky, 1987). Early theories (Bowlby, 1951) suggested that the disruption of a relationship between children and their initial
caregivers resulted in significant distress and led to psychological difficulties. Even when adoptees were separated very early in life (e.g., at birth) from the initial caregiver, theorists maintained that other experiences and situations associated with adoption occurring later in life put the child at psychological risk.

Because issues surrounding the adoptee have come to the forefront, questions have been raised as to how adoption might influence child development. For example, do adoptees face more psychological challenges than non-adoptees? Do adoptees face unusual social-emotional difficulties? Do they follow unique patterns of adjustment? As a result of some factor unique to adoptees, do they differ from non-adoptees in self-esteem or self-confidence? Is there a higher prevalence of antisocial behavior or conduct disorders among adoptees?

A number of strategies have been used to analyze these questions of increased risk in adoptees. One strategy includes the examination of social work literature related to adoption outcomes. Brodzinsky (1987) reported that social work studies focusing on post-placement outcomes indicate high success rates. However, he maintains that, typically, measures used by these studies were highly subjective and prone to varying interpretations. Kadushin (1980) suggested about 84 percent of these social work studies were described as "successful" or "moderately successful," whereas only 16 percent were judged to be failures. When speaking of children and a post-adoption failure rate of 16 percent, this figure may seem unacceptable. However, as Brodzinsky (1987) and
Kadushin (1980) point out, this 16 percent may reflect the rate of general family maladjustment rather than maladjustment unique to adoptive families (Brodzinsky, 1987, p. 26).

Another strategy for analyzing adoption risk is to study the epidemiological data on the rate of psychological treatment of adoptees in treatment settings. A number of researchers report that there has been an increase in adoptees receiving mental health services (e.g., Berry, 1992). Although adoptees make up only two to three percent of the entire population, adoptees are over represented in treatment settings -- from 4 to 5 percent of the clinical population (Brodzinsky, 1987; Hartman, 1984).

A third strategy is to examine the actual symptomatology of adoptees presenting with psychological difficulty. The goal is to isolate specific patterns of behavior or social-emotional characteristics unique to adoptees. Brodzinsky (1987) suggested that there are indeed behavioral and social-emotional characteristics more commonly exhibited by adoptees than their nonadopted peers. For example, Brodzinsky found that clinic-referred adopted children were more likely to display aggressive behavior, lower self-confidence, feelings of alienation and rootlessness, and various learning difficulties. Dalby, Fox, and Haslam (1982) reported that adopted populations were elevated in child health care situations, such as in the treatment of attention deficit disorder and hyperactivity.

Finally, the study of non-clinic samples of adopted children can provide a
perspective in determining potential risk factors. As Brodzinsky (1987) suggested, the
goal is to discover whether behavioral or social-emotional patterns of representative
samples of nonclinic adopted and nonadopted children differ in some way. Thus far,
research outcomes are conflicting. For example, Plomin and DeFries (1985) of the
Colorado Adoption Project examined patterns of mental and motor development, (using
the Bayley scales), temperament, and behavioral problems among adopted and
nonadopted infants from 12 to 24 months old. Results led them to conclude that there
were no important differences. Similarly, studies of school-age children revealed no
differences between adoptees and nonadoptees in personality and social adjustment, as
well as in academic performance (Norvell & Guy, 1977). In contrast however, Lindholm
and Touliatos (1980) found higher rates of conduct disorders, personality problems, and
socialized delinquency among adopted adolescents when compared to nonadopted
adolescents. Brodzinsky, Schechter, Braff, and Singer (1984) found higher rates of
psychological and school-related problems and lower levels of social competence and
school achievement among adopted children. Brodzinsky (1987) cited a study that used
the Child Behavior Profile (CBP) to discover that 36 percent of adoptive mothers rated
their child "clinically significant" in one or more of the behavior areas included on the
CBP, as opposed to 14 percent of nonadoptive mothers.

To date, there is no conclusion to be drawn from the literature regarding an
undisputed potential for risk related to adoption. However, thus far, research has
revealed many important issues and has allowed for more informed debate concerning any potential psychological or developmental risks in adopted children. Studies of differences between adopted and nonadopted samples have become more focused and defined. Researchers have attempted to distinguish particular variables from others and more accurately examine specific characteristics, such as self-concept, self-esteem, emotional adjustment, etc.

The current report is an attempt to bring together literature that discussed a difference between adopted and nonadopted children. Specifically, it will examine overall differences between adopted and nonadopted children in terms of self-related social-emotional characteristics.

Rationale for the study of self-related characteristics

As noted by Norvell and Guy (1977), childhood and adolescence can be a time of perplexity and confusion. Children and adolescents attempt to seek individuality and autonomy. Norvell and Guy reported that this need to discover direction and meaning was a result of the inability to adequately conceptualize themselves, their expectations, and values - often referred to as the Identity Crisis.

Although any child or adolescent is susceptible to experiencing self-related problems, it has been suggested that adoptees are at increased risk. Triseliotis (1973) suggested that healthy development of the self may be complicated by having two sets of parents. Adopted children may feel some need to obtain information about biological
parents in order to complete their self image. Furthermore, Touliatos (1973) maintained that adopted children may view themselves as only half complete - that the other half is blurred by adoption. Ultimately, these feelings of a less-than-adequate background may result in feelings of inferiority, insecurity, low self-esteem, and low self-concept.

To date, there is very little research that included experimental comparisons of self-concept between adopted and nonadopted children. For the most part, research studies comparing these groups have typically examined more observable characteristics, such as antisocial behavior. Because of the lack of research, this review will include more than one type of self-related characteristic, namely, self-concept, self-confidence, self-esteem, and social-emotional adjustment. The purpose for this review was to integrate and discuss prior research related to the influence of adoption on these characteristics.

The objectives were as follows:

1. To summarize the current state of research related to how adoption influences the previously stated constructs.
2. To discuss the strengths, weaknesses, and issues in prior research.
3. To provide suggestions for directions in future research by drawing conclusions from prior research.
Methods

Locating the Review Studies

A total of 12 articles were obtained covering the time period of 1977 to 1992. The majority were located in computer databases (ERIC and PsychLIT). In addition to these databases, Psychological Abstracts, and Research in Education (RIE) contained other articles included in this review. The following descriptors were used in searching resources:

- adopt/ion/ed/ee(s)
- self-concept
- self-confidence
- self-esteem
- self-perception
- biological parents
- adoptive parents
- adopted children
- biological children
- non-adopted children
- social adjustment
- emotional disorders
- emotional adjustment
- adjustment
- attachment

Criteria for Inclusion/Exclusion

Criteria for inclusion/exclusion was as follows: Articles must discuss the relationship between adoption and some psychological or developmental characteristic related to the self. Included in this review were self-concept, self-esteem, self-confidence, and social-emotional adjustment or psycho-social adjustment.

Reviewing Procedures

Each study was systematically examined using the traditional review approach to discover characteristics potentially related to study outcomes. A coding sheet was developed to help identify and quantify these characteristics and to provide a common
ground from which studies were analyzed. Data from each study or article were collected and recorded onto the coding sheets. Coding sheets included bullet comments and items to be examined in each article and were organized so as to make the analysis of each article as objective as possible. For example, the statement "Type of assessment instruments" was included on the sheet and a space was provided to list any reported instruments used in the study. If no instrument was reported, it was so noted on the sheet. Data from the coding sheets were summarized and transformed into table format providing a concise summary of study characteristics. Table 1 lists relevant characteristics for each study and Table 2 summarizes these characteristics. Results of the analysis are discussed below.

**Study Characteristics**

Several study characteristics were identified bearing potential effect on study outcome. They were as follows:

1. *Major findings*. That is, did the results indicate a difference between adoptees and non-adoptees? If a relationship between adoption and a self-related characteristic was discussed, which outcome of adoption was supported - positive (*for* adoption) or negative (*against* adoption)?

2. *Dependent measure(s)*. The dependent variables included in this review were the self-related characteristics of the sample (i.e., self-confidence, self-esteem, etc.). It should be noted that most of the studies included in this review discussed dependent
Table 1
Study Characteristics

<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Major Findings</th>
<th>Dependent Variables</th>
<th>Testing Methods</th>
<th>Research Design</th>
<th>Sample Size</th>
<th>Sample Characteristics</th>
<th>Type of Analysis</th>
<th>Internal Validity Rating</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brodzinsky (1987)</td>
<td>Adoptees more likely to manifest psychological problems</td>
<td>Adjustment (psychosocial)</td>
<td>N/A</td>
<td>Review of selected studies</td>
<td>N = 12</td>
<td>Primary research studies</td>
<td>Narrative Analysis</td>
<td>Med</td>
<td>2</td>
</tr>
<tr>
<td>Lindholm &amp; Touliatos (1980)</td>
<td>Increased rates of personality self-related problems</td>
<td>Personality (i.e., anxiety/withdrawn)</td>
<td>Quay's Behavior Problem Checklist</td>
<td>Causal-Comparative</td>
<td>Total N=3032 adoptees=41 non-adoptees=2991</td>
<td>Entire grade school population (basic education)</td>
<td>ANOVA</td>
<td>Med</td>
<td>3</td>
</tr>
<tr>
<td>LeVine &amp; Sallee (1990)</td>
<td>Higher rates of mental health interventions among adoptees</td>
<td>Adjustment needs of the adoptee</td>
<td>Findings based on prior research</td>
<td>Reviewed primary research</td>
<td>Primary research (N=5)</td>
<td>No specific sample defined</td>
<td>Narrative Analysis</td>
<td>Med</td>
<td>3</td>
</tr>
<tr>
<td>Marquis &amp; Detweiler (1985)</td>
<td>Adoptees are more confident and have a more internal locus of control than non-adoptees</td>
<td>Confidence as measured by Locus of Control Scale</td>
<td>Mailed survey including a Locus of Control Scale</td>
<td>Causal-Comparative</td>
<td>Total N=167; adoptees=46; non-adoptees=121</td>
<td>Mean age=16 at time of study; adoptees all adopted before one year of age</td>
<td>4-way mixed ANOVA</td>
<td>Low</td>
<td>2</td>
</tr>
<tr>
<td>Nemovicher (1960)</td>
<td>Adopted boys had higher rates of tenseness, fearfulness</td>
<td>Tenseness, fearfulness</td>
<td>Teacher ratings, Rorschach, T.A.T., Figure-Drawing Tests</td>
<td>Causal-Comparative</td>
<td>Adopted boys N = 30 Nonadopted N = 30</td>
<td>Adopted and nonadopted boys, selected for similar IQ, grade, religion, SES, and sibling position.</td>
<td>Chi-square and t-test.</td>
<td>Med</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 1
Study Characteristics

<table>
<thead>
<tr>
<th>Study Description</th>
<th>Self-concept</th>
<th>Berger Self-Concept Scale</th>
<th>Causal-Comparative</th>
<th>N = 721 (adopted n=38, with 38 matched non-adopted)</th>
<th>College students in sociology and psychology classes</th>
<th>t-test</th>
<th>High</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norvell &amp; Guy (1977)</td>
<td>No differences in self-concept</td>
<td>Self-concept</td>
<td>Berger Self-Concept Scale</td>
<td>Causal-Comparative</td>
<td>N = 721 (adopted n=38, with 38 matched non-adopted)</td>
<td>College students in sociology and psychology classes</td>
<td>t-test</td>
<td>High</td>
</tr>
<tr>
<td>Partidge (1992)</td>
<td>Adoptees are at risk of psychosocial and personal problems</td>
<td>Self-concept, identity, and others</td>
<td>No statistical measure</td>
<td>Cited personal and professional experience</td>
<td>Not indicated</td>
<td>Not indicated</td>
<td>Not indicated</td>
<td>Low</td>
</tr>
<tr>
<td>Schoborg-Winterberg &amp; Shannon (1989)</td>
<td>No differences in adjustment</td>
<td>Psychosocial Adjustment</td>
<td>Mailed survey including Berger's Self Acceptance Scale</td>
<td>Causal-Comparative</td>
<td>Total N=176 (adopted n=94; non-adopted n=82)</td>
<td>Matched according to sex, education, background and income; all adults</td>
<td>Not indicated</td>
<td>Low</td>
</tr>
<tr>
<td>Wierzbicki (1993)</td>
<td>Adoptees at higher risk for maladjustment</td>
<td>Psychological Adjustment</td>
<td>N/A</td>
<td>Reviewed primary research</td>
<td>N = 66</td>
<td>Primary studies related to adjustment patterns of adoptees</td>
<td>Meta-Analysis</td>
<td>Med</td>
</tr>
<tr>
<td>Yoest (1990)</td>
<td>Opinion paper arguing for &quot;positive aspects of adoption,&quot; such as increased self-confidence</td>
<td>Self-confidence</td>
<td>N/A</td>
<td>One-shot case study</td>
<td>N=1</td>
<td>N/A</td>
<td>N/A</td>
<td>Low</td>
</tr>
</tbody>
</table>
### Table 2
Summary Data of Review Literature

<table>
<thead>
<tr>
<th>Study Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Findings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differences exist between groups</td>
<td>8</td>
<td>73%</td>
</tr>
<tr>
<td>negative differences</td>
<td>6</td>
<td>55%</td>
</tr>
<tr>
<td>positive differences</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>No differences exist</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Dependent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>Confidence/Self-esteem</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>Adjustment</td>
<td>5</td>
<td>45%</td>
</tr>
<tr>
<td>Fearfulness/Tenseness</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Testing Methods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used standardized instrument</td>
<td>6</td>
<td>55%</td>
</tr>
<tr>
<td>Used face-to-face interview</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>Used survey or questionnaire</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td>Used combination of the above</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td>None used</td>
<td>5</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Research Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causal-Comparative</td>
<td>6</td>
<td>55%</td>
</tr>
<tr>
<td>Literature Review</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>Case Study/Professional Opinion</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causal-Comparative Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Reviews of Literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td><strong>Characteristics of the Subjects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussed age-at-placement</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>Discussed matched vs. non-matched</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Type of Analysis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANOVA</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>Narrative/Not indicated</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>Not indicated/Not applicable</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>Study Characteristics</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Internal Validity Ratings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High (few to no threats)</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>Medium</td>
<td>6</td>
<td>55%</td>
</tr>
<tr>
<td>Low (many threats)</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Overall Ratings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 (good)</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>4 (above average)</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>3 (average)</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>2 (below average)</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>1 (poor)</td>
<td>3</td>
<td>27%</td>
</tr>
</tbody>
</table>
variables somewhat unrelated to others. That is, one study may discuss the influence of adoption on *self-esteem* while another on *social adjustment*. These various characteristics were included in this review *together* due to the lack of sufficient research on any single self-related issue and its relationship with adoption.

3. *Methodological characteristics.* These included (a) the age at which adoption placement occurred; and (b) whether the participants were "matched." That is, whether the adoptive parents and adoptee were of the same race.

The following is a discussion of these characteristics as found in Table 1 and summarized in Table 2.

**Major Findings**

A wide range of results were represented by these studies. Some reported differences between adopted and non-adopted populations while others did not. However, whether or not their hypotheses were supported, the majority of authors acknowledged that the research was motivated by the hypothesized influence of adoption on specific self-related characteristics.

One of the more frequently occurring variables in the self-related literature was psychological adjustment of the adoptee. Brodzinsky (1987) proposed a definition of adoption adjustment from a psychosocial perspective. The basic concept of the definition is that the experience of adoption exposes the adoptee and adoptive family to a unique set of psychosocial challenges that complicate the more universal developmental
challenges of general family life. For the adoptee and his family to make satisfactory progress through the various developmental stages, there must be an adequate resolution of these unique challenges. Brodzinsky adapts Erikson's (1963) psychosocial developmental model to the adoptee and family, addressing the most salient challenges confronting them. For example, during the Infancy Stage (Trust vs. Mistrust), the family must resolve issues surrounding infertility, stress related to placement processes, coping with social stigmas of adoption, and the problems of developing secure attachment relationships in cases of delayed adoption placements. Similar adaptations to the other stages (i.e., Toddler/Preschool, Middle Childhood, and Adolescence) of Erikson's model were made by Brodzinsky.

In a review of the literature, Brodzinsky (1987) examined the psychological risk associated with adoption in terms of this proposed model of adoption adjustment. Studies included in his review were not exhaustive but selected from the literature to describe particular aspects of adjustment challenges facing the adoptee. Twelve studies were selected which compared adjustment-related factors (e.g., temperament, behavior problems) between adoptees and nonadoptees. Overall, 42 percent (n = 5) of the studies reported a statistically significant difference between adoptees and nonadoptees, whereas 58 percent (n = 7) reported no significant differences. Despite the higher percentage of studies revealing no differences, Brodzinsky suggested that, as a group, adoptees show a higher incidence of behavioral, emotional, and academic problems than
their nonadopted peers. Brodzinsky made the observation that research in this area has been plagued by numerous conceptual and methodological limitations, such as being atheoretical - that studies have not been guided by theory. In light of this, Brodzinsky proposed his psychosocial model of adoption adjustment to aid future researchers in conceptualizing research problems.

LeVine and Sallee (1990) also reported that adoptees are at greater risk for psychological maladjustment and cited several other literature reviews that reported similar findings. According to LeVine and Sallee (1990), research data clearly indicated that adjustment to adoption can be troublesome both emotionally and behaviorally for the adopted child and family. In fact, they stated that, "under the most ideal circumstances, the adopted child will experience personal stresses as he or she moves toward integration of the adoptive status" (p. 217-218). Their argument stemmed from a hypothesis that family problems, regardless of being adopted or not, become more complex and intense due to the adoptive status.

Lindholm and Touliatos (1980) compared the psychological adjustment of 41 adopted children and 2,991 nonadopted children using Quay's Problem Behavior Checklist. Results showed that adopted children displayed higher rates of conduct disorder and personality problems. The occurrence of personality problems in adopted children increased from Kindergarten through 8th grade. For the nonadopted children, the same was true through the 3rd grade, but decreased after that. The authors of this
study pointed out that, although results generally confirmed expectations of increased problems in adopted children, the findings should be interpreted with caution. One of the weaknesses in the study was that no information regarding the adopted children's age-at-placement was obtained. How pre-adoptive history may have influenced results was not determined. If the purpose of a study is to isolate the factor of adoption as a causative factor to some psychological difference in children, then children who may have experienced trauma before being adopted, such as neglect or abuse, should not be included in such studies. Outcomes may reflect psychological characteristics resulting from events that took place prior to the adoption rather than the adoption itself.

Schoborg-Winterberg and Shannon (1986) investigated the differences in psychosocial adjustment between 94 adults adopted as children and 82 nonadopted adults using the Berger Self-Acceptance Scale. Their sample for this study was homogeneous with respect to sex, education, family background, and income. Overall, results indicated no significant difference between the two groups in psychosocial adjustment. However, interesting findings were observed in the measures of central tendency and dispersion. For example, the nonadopted group had a smaller range of scores as compared to the adopted group (74 and 121, respectively). The mode for each group was 62 (nonadopted) and 82 (adopted). The adoptees had both the lowest and highest adjustment rating scores (160 and 39, respectively). The means for nonadopted and adopted groups were similar (80.4 and 79.9, respectively).
An interesting aspect of this study was that the adopted group members were all currently seeking information about their biological heritage. Some researchers have hypothesized that adoptees who search for information about birthparents and heritage are ungrateful to their adoptive parents or are otherwise unstable psychologically. With this assumption, results from this type of study would have been expectedly different. However, no statistically significant difference in adjustment was observed.

Wierzbicki (1993) conducted a meta-analysis of literature related to the psychological adjustment of adoptees. A total of 66 published studies comparing the adjustment of adoptees to nonadoptees were reviewed. Results of the meta-analysis revealed an effect size of .72, indicating that adoptees had significantly higher levels of maladjustment. A contributing factor to this finding was that a majority of studies reported adoptees to be overrepresented in clinic populations. For these studies alone, the mean effect size was 1.38. Wierzbicki also reported a significantly higher rate of externalizing behavior and academic problems in adoptees.

Of the five articles that examined psychological adjustment of adoptees, 80 percent (n = 4) reported negative outcomes and 20 (n = 1) percent reported no significant differences between adoptees and nonadoptees.

Self-concept was examined in three of the review articles. Norvell and Guy (1977) conducted a comparison of self-concept between 38 adoptees and 38 nonadoptees. The sample was drawn from a pool of 721 male and female respondents from sociology and
psychology classes in two southern universities. They were matched for age, sex, race, marital status, and completed the Berger Self-Concept Scale. A comparison of mean self-concept scores for adopted and nonadopted groups using the student's $t$ for independent samples revealed no significant difference. Validity was increased by matching the two groups. However, a potential threat might be caused by the sample coming from a university setting. It could be assumed that university student populations differ in socio-economic status, motivation levels, and overall achievement levels than the general population. Thus, this sample may be unrepresentative. However, because the authors compared adoptees to nonadoptees within the same population, any factors contributed by adoption might expectedly appear nonetheless. Another strength in this study was that the adoptees were identified after respondents completed the survey on which they indicated adoptive status. This may have decreased over-estimation had the participants been aware of the nature of the study.

Groze (1992) suggested that self-concept is influenced by three factors: (1) adoption status, (2) pre-adoptive history, and (3) matched vs. non-matched placement status. Groze (1992) reviewed several studies that examined how adoptive status influenced self-concept. In summarizing these results, he suggested that low self-concept due to adoption was not found - that overall, data obtained in these studies was above the normative mean scores. However, these results are tentative because of attrition of the sample over time and because nonrandom techniques were used to recruit
comparison groups in the majority of the reviewed studies. As a follow-up, Groze (1992) conducted a study that assessed special needs adoptees and how their self-concept was influenced by pre-adoptive history. Fifty-seven children were interviewed and asked to respond to items from the Piers-Harris Self-Concept Scale. Overall, scores obtained suggested that the adopted children scored better on the total self-concept scale and all subscales than either the normative group or clinical group as established by Piers (1984). Statistically however, no significant differences were observed. Interestingly, the sample was deliberately taken from a group of special needs adoptions, that is, children who were placed at later ages due to some history of maltreatment or disability. Over half of the respondents reported physical or sexual abuse prior to adoptive placement. In light of this, expected self-concept scores would have been lower than the normative sample. One explanation for this could be that the adoptive families of these children were receiving various forms of intervention assistance, such as family therapy.

Partridge (1992) contributed an article that discussed self-concept issues in adopted children. In her personal experience of being adopted, she reported that adoptees face a number of special challenges to emotional maturity and consolidation of identity, and that, on the average, they experience a lower sense of identity and self-concept. One contributing factor was described as the lack of groundedness in reality. Partridge (1992) tributes this to the lack of knowledge of one's origins, including information about birthparents, heritage, etc. This lack of knowledge results in adoptees
feeling that they, too, are unreal. Another contributing factor was the tension and secrecy that is frequently experienced in adoptive families. She indicated that when adoptive families maintain secrecy about the adoption, the feelings of an unreal existence are increased, resulting in lower self-concept.

Of the articles related to self-concept, 33 percent \((n = 1)\) reported negative outcomes of adoption, and 67 percent \((n = 2)\) reported no differences between adoptees and nonadoptivees.

The issue of self-confidence was discussed in an opinion paper by Yoest (1990). Yoest argued that there is no empirical evidence linking psychological problems with adoption. Struggles with self-confidence was described as a common problem for all children and adolescents, regardless of adoptive status. In contrast, Nemovicher (1960) compared 30 adopted boys to 30 nonadopted boys on measures of fearfulness and tenseness. The groups were matched for age, intelligence, grade-level, religion, socio-economic status, and sibling position. Participants completed the Rorschach, T.A.T., and Figure-Drawing Tests. Results indicated the adoptive group to have higher levels of fearfulness and tenseness. Ruling out personal and environmental factors (due to sampling procedures), Nemovicher (1960) attributed this difference to the factor of adoption. In further contrast, Marquis and Detweiler (1985) compared adopted and nonadopted groups of individuals (ages 13 - 21) on measures of self-confidence, fearfulness, and self-image. Forty-six adopted and 121 nonadopted individuals responded
to the mailed questionnaire which included items from a "World View Survey" and Rotter's Internal-External (I-E) Locus of Control Scale. Significant differences between group scores were observed, however, not in the expected direction, but in the positive direction for the adopted group. Findings from this study indicated that adopted persons see themselves as being more in control of their lives than the nonadopted group. Higher scores on the items measuring self-confidence, fearfulness, and self-image were also obtained from the adopted group.

Of the articles related to self-confidence, fearfulness, or tenseness, 33 percent (n = 1) reported no differences between adoptees and nonadoptees, 33 percent (n = 1) reported a negative difference, and 33 percent (n = 1) reported a positive difference.

Overall, 73 percent of the studies (n = 8) reported finding specific differences in self-related characteristics between adoptees and non-adoptees, whereas 27 percent (n = 3) indicated no difference. Of the studies that reported a difference, 75 percent (n = 6) reported results supporting negative outcomes of adoption, and 25 percent (n = 2) supporting positive outcomes.

**Dependent Measures**

Several different constructs were used as dependent measures in these studies. They were: (a) self-concept (30%, n = 3); (b) self-confidence (20%, n = 2); (c) social-emotional or psychological adjustment (40%, n = 4); and (d) fearfulness/tenseness (10%, n = 1).
The research base indicated that investigators were interested in studying various self-related topics associated with adoption. Studies included in this review represent the majority of studies that examined self-related characteristics. Two other types of self-related issues discovered in the review included *identity formation* and *attachment patterns* in adoptees. Identity formation was excluded because only one study was found. Attachment patterns was excluded because there was enough research available to conduct a review on that topic alone.

**Methodological Characteristics**

1. *Testing methods.* Due to the varying dependent measures represented by these studies, a wide variety of testing instruments were used. Additionally, several of the studies were primary studies and therefore did not include a specific instrument per se. Fifty-five percent (n = 6) used a specific assessment instrument, face-to-face interviews, surveys, questionnaires, or a combination thereof. In discussing differences between adoptees and non-adoptees, or a relationship between adoption and developmental difficulties, 45 percent (n = 5) did not use any of the above testing methods.

Potential errors can be made when employing standardized tests. Of the studies that included the use of an instrument, none reported on the statistical soundness of the instrument. Eighteen percent (n = 2) acknowledged that the authors of the instrument urged caution when generalizing results because of possible sampling error and non-representativeness of the normative data. Unless researchers include basic facts
about the statistical soundness of an instrument, findings must be considered cautiously. It is highly recommended that researchers report the validity of instruments in empirical research - a fundamental task that promotes credibility.

2. Research design. Fifty-five percent (n = 6) of the studies were causal-comparative, 27 percent (n = 3) were reviews of literature, and 18 percent (n = 2) were case studies or opinion papers. Each of these methods are effective in adding to the knowledge base. However, from this review, it seems important that more empirical, causal-comparative designs be used. Determining causal patterns between any variables, particularly human characteristics, with any degree of certainty, is difficult. However, the advantage of this type of design is that it allows the study cause-and-effect relationships with more certainty than other designs (Borg & Gall, 1989).

3. Sample size. For the stated purpose of each study, all sample sizes appeared to be appropriate. See Table 1 for a summary.

4. Type of statistical analysis used. Of the studies included in this review, 27 percent (n = 3) used ANOVA procedures, 18 percent (n = 2) used descriptive statistics, 27 (n = 3) percent used a narrative style, 9 percent used the meta-analysis technique, and 18 percent (n = 2) did not indicate a specific statistical procedure. Reliable statistical procedures were underutilized in these studies. Not only do statistical procedures provide a way to simplify data, but they allow readers to pass their own judgment as to the statistical soundness of the results.
Characteristics of the Subjects

1. *Age at which adoption placement occurred (age-at-placement).* Eighteen percent (n = 2) of the studies included the age at which adoption of the child occurred. This was an unfortunately low percentage due to the potential importance of this factor. Pre-adoptive history of the child may certainly influence study outcomes. If authors did not report variables relating to experiences of the participants before placement occurred, results may not be interpreted accurately. Children whose age-at-placement was later (e.g., 2-3 years) have been shown to experience higher rates of neglect, abuse, and family instability. Therefore, generalization of results from studies which included later age-at-placement participants should not be made to populations of adopted children who were placed at earlier ages. These two variables should be properly accounted for before generalization occurs.

The studies that included age-at-placement as a factor in study outcome (n = 2) discussed differences between "special needs" adoptions (children adopted after age 3) and non-adoptees. One of these studies found that there were no differences between special needs adoptees and non-adoptees and the other argued that psychological problems later in life increase with the age at which adoption placement occurred. Understandably, children who come from abusive environments prior to placement with adoptive families, may experience more difficulty in adjusting emotionally and socially than infants or children with stable, healthy pre-placement environments.
It should be noted that the term "special needs" not only includes children adopted at age 3, but also children (including infants) who have a disability, such as physical impairments, or developmental delays. None of the studies included in this review examined these specific variables. In fact, during the search, no such study was discovered. Accordingly, future research attempts relating to specific special needs elements of adoption are warranted.

2. *Matched or non-matched placements.* A matched placement refers to an adoption placement where the child and parents are of the same race. As was the case with special needs studies, research relating to matched and non-matched characteristics of participants was lacking. McRoy, Zurcher, Lauderdale, and Anderson (1982) studied the difference in self-esteem between a group of Black children adopted by Black parents, and a group of Black children adopted by White parents. McRoy et al. reported no difference in levels of self-esteem. Future research might investigate whether these findings are consistent across other races. This study was not included in the current review because it did not examine specific differences between a adopted and nonadopted populations, rather the difference between two types of adopted populations.

Overall Ratings

An overall quality rating was assigned to each study on a scale of 1 to 5 (1 = low quality, 5 = high quality). Criteria was based on threats to internal validity, authors' use of findings, and appropriateness of statistical analysis. Eighteen percent (n = 2) received
a rating of 1; 27 percent (n = 3) a rating of 2; 27 percent (n = 3) a rating of 3; 18 percent (n = 2) a rating of 4; and 9 percent (n = 1) a rating of 5. The mean rating was 2.7 with a standard deviation of 1.23. The overall ratings included a high percentage of low scores (45% of the studies received a 2 or below). This was due in part to frequent occurrences of threats to internal validity and to the difficulty of controlling these threats. For example, several articles were not empirical or causal-comparative by design. Case study, professional opinion, and small literature review articles received low internal validity ratings because of the inherent danger in generalizing outcomes of individual or small sample cases.

Conclusions

This review presented a wide range of findings represented by current research. Many of the conclusions rest on either end of the continuum. For example, some studies reported differences in the negative direction, while other in the positive.

There are explanations for these wide-ranging differences. For example, many studies used standardized rating scales and other instruments to examine particular variables. However, results warranted cautious interpretation because reliability of the instruments and procedures were not adequately described in most studies. One of the most important findings from this review was that researchers did not support results with a description of the statistical soundness of testing methods. Without statistically sound study and analysis, outcomes will vary.
Another shortage areas in the research was that of special needs adoptions. Only 10 percent of the studies addressed this variable and how it may influence self-related characteristics of adopted children. Furthermore, even though adoption has been around for a long time, the general knowledge base related to its influence on children as a whole is very shallow. This fact is reflected by the inclusion of multiple dependent variables (i.e., self-concept, adjustment, etc.) in this review. No single variable was studied enough to provide a sufficient sample of articles for exclusive review.

Finally, questions of validity were prevalent and arose frequently in many studies. Few authors analyzed their hypotheses from theoretical points of view making interpretation perplexing and inaccurate. In addition, deficient research design, such as small sample selections or the use of archetype case studies, make generalization inappropriate. Indeed, studies that attempt to examine differences in human characteristics are highly susceptible to error. Constructs such as self-concept, self-esteem and self-confidence, can vary widely between participants and are difficult to assess empirically. To compound this problem, the many extraneous variables, such as pre-adoptive history, age-at-placement, socio-economic status, family composition, etc., make development of a satisfactory research design troublesome.

Overall, an unacceptable number of studies in this review met satisfactory criteria for validity. This, combined with the inconsequential amount of research existing, results in a great need and opportunity for contribution.
In summary, a total of ten articles were reviewed that examined differences in self-related characteristics between adopted and nonadopted children. Self-related characteristics included in these studies were self-concept, self-confidence/esteem, social-emotional adjustment, and fearfulness/tenseness. Of these studies, 50% found negative differences (e.g., adoption resulted in lower overall self-concept) between adopted and nonadopted group members. Twenty percent found positive differences between groups (e.g., adoption resulted in higher self-confidence). Thirty percent of the articles reported no differences in self-related characteristics between adopted and nonadopted children.
References


