

Long-Term Effects Of Adoption: An Empirical Study Of Adult Adoptees

M Lieberman, J Morris

Citation

M Lieberman, J Morris. *Long-Term Effects Of Adoption: An Empirical Study Of Adult Adoptees*. The Internet Journal of Academic Physician Assistants. 2003 Volume 4 Number 1.

Abstract

The present study seeks to identify psychological differences between extrafamilial adult adoptees and a non-adopted comparison group through projective tests and life history interviews. Two demographically matched groups (18 adoptees and 16 non-adoptees) were administered the Thematic Apperception Test and Loevinger's Sentence Completion Test (a measure of Ego Stage). The TAT was scored thematically for "Alienation" and McClelland's "Need For Affiliation". Interview data were examined for corroboration or refutation of themes present in the projective tests. Results indicated no between group differences in Ego Stage however adoptees were significantly higher on some "Alienation" scores and non-adoptees were significantly higher on some "Affiliation" scores ($p < .05$). In addition, adoption status was predictable ($p < .05$) from a discriminant analysis using variables that had significantly zero-order correlations with it.

INTRODUCTION

The purpose of this study was to compare extrafamilial adult adoptees and a group of non-adoptees on the Thematic Apperception Test and Loevinger's Sentence Completion Test. The TAT was scored using McClelland's "Need for Affiliation" and a system specifically developed for this study, called "Alienation." The Sentence Completion Test yields a measure of Ego Stage. In addition various demographic variables were collected for descriptive purposes. Life history interviews were administered to the adopted group for the purpose of examining themes emergent in the projective tests.

Adoptee research has been plagued by a dearth of comparative studies and statistical analyses, largely relying instead upon clinical case studies, interviews, and intuitive essays. Studies that do compare adoptees and nonadoptees have been inconclusive with respect to their findings. Most rely on standardized instruments to evaluate between group differences, rather than instruments, interviews, and questionnaires, designed to elicit material salient for adoptees.

Cubito (1999) compared adoptees to normative data utilizing the Brief Symptom inventory as a measure of overall distress, the Zung Self-Rating Depression Scale, and the Anger Content Scale of the MMPI-2. Adoptees were

compared to two normative scales; one for everyday people in our society, and one for a sample of outpatient mental health clinic patients. The overall finding was the adoptees scored about halfway between the outpatient and normative data on all of the test instruments. The same author found another sample of adoptees to score significantly higher ($p < .01$) on the same measures of overall distress and depression but not on the anger scale when compared with normative data for these tests (Cubito, 1996). Cubito and Brandon (2000) reported higher levels of psychological maladjustment among adult adoptees when compared to normative data; however, their scores did not approach those levels of a typical outpatient population. Their study also found that females scored higher on a scale measuring anger. Fletcher (1997) compared adopted and nonadopted adults with a survey instrument designed to identify correlates of psychosocial adjustment. Overall, the nonadopted group manifested better adjustment than the adopted group. Like the Cubito studies however, both groups were within the normal range of adjustment. Over four thousand adopted adolescents were compared to the same number of nonadopted adolescents on nine (9) factors of emotional and behavioral adjustment and three factors of family functioning. The study found that adoptees showed lower levels of adjustment on nine of the twelve scales (Sharma, McGue, & Benson, 1996). Earlier studies (Maughan, Collishaw, & Pickles, 1998) found that adopted women

showed very positive adult adjustment in all areas; however, adopted men have difficulty in the employment and social support domains. Wasserman (1998) compared the psychosocial adjustment of a group of young adults who had been adopted as children with that of a group of young adults who had not. He was able to discriminate searching from nonsearching adoptees using a Life Events Question instrument but otherwise was unable to show significant differences between the two groups using the Miller Behavioral Style Scale, or the Repression-Sensitization Scale of the MMPI. Finally, Delmonaco (1997), found that adoptees who rated themselves as more similar to their adopted parents scored significantly higher on the Tennessee Self-Concept Scale than those who rated themselves as more dissimilar to their adoptive families. Feigelman (1997) compared the adult behavior patterns of adoptees with those of others raised by both biological parents. The study found that adoptees showed a greater incidence of problem behaviors than children raised by biological parents during adolescence. However, in areas such as recent use of drugs, educational attainments, job holding, and marital stability, they appeared similar to those raised in intact biological families.

Conditt (1998) used the Rosenberg self-esteem scale to measure the effects of eight weeks of group therapy on the self-esteem of five (5) adult adoptees. The study found no significant changes in self-esteem.

Data from the National Child Development Study (NCDS) were used to examine the psychosocial functioning of an unselected sample of adopted and non-adopted children from similar birth circumstances. The study found that adopted adult women showed positive adjustment in all examined domains. However, findings suggest some difficulty for adopted adult men in the employment and social support domains. A number of adoption studies have found an increased risk for behavior problems among adoptees (Collishaw, Maughan, & Pickles, 1998).

Sobczak (1988) compared adult adoptees and nonadoptees on levels of depression and quality of relationships with parents. The Beck Depression Inventory, the Parent Bonding Instrument, the Social Readjustment Rating Scale, and a Personal Data form was completed by one hundred and fifty-one (151) adoptee and non-adoptees. The findings suggest that adoptees can enjoy mental health and normal interpersonal relationships. However, they are somewhat vulnerable to depression and are highly sensitive.

Adoptees' portrayal of the development of family structure was explored in a study of college students (Sobol, 1994). A group of college undergraduate adoptees was compared to a group of college undergraduates who were nonadopted regarding recollection of family relationships at different points of development. Adoptees remembered being close to their fathers during the preschool period. Both groups expressed a similar pattern of distance during adolescence.

Brodzinsky's (1993) research supports the notion that adoptees are more vulnerable to emotional, behavioral, and academic problems than the nonadopted living with their biological parents.

Data from the National Health Interview Survey were used to determine if adopted children are more likely to have emotional or behavioral problems than non-adopted children (Brand & Brinich, 1999). They found that adopted and foster children are more likely to have mental health contacts than non-adopted children. When comparing adopted and foster children with non-adopted children to see which group had more behavioral problems, the findings are mixed; however, there were no significant differences between these two groups when a small group of influential cases were eliminated. The study also found that the differences between the groups were not representative of adoptees and foster children as a whole. Patterns of behavior problems among the majority of adopted and non-adopted children were found to be comparable.

Eldred (1976) related psychopathology in adoptees to age at placement, agency versus independent placement, and the best age to tell a child they are adopted.

Cohen and Westhues (1995) compared self-esteem, school achievement, and friends between inter-country adoptees and their siblings. One hundred twenty-three (123) Canadian families were studied to see how social factors influence the development of self-esteem. One hundred fifty-five (155) international children had been adopted by these families during the 1970s. The study found that the self-esteem among adoptees is at least as strong as the self-esteem among the general population. In the general population, both females and males demonstrate the same pattern of self-esteem development. Females take longer to develop inner security. The findings concur with the thesis of M. Rosenberg (1989) that parental interest, school achievement, positive peer relationships, and special talents or skills enhance self-esteem. The sense of belonging to one's family, school, and peers, appears to be linked to self-esteem.

Fletcher (1997) studied one hundred adopted and one hundred non-adopted adults over eighteen years of age to identify correlates of psychosocial adjustment. A survey instrument was completed, which included maternal overprotection, maternal caring, biological and adoptive mother contacts, knowledge of background information surrounding the adoption, similarity between respondents and adoptive parents, age at which they learned adoption status, and gender. Self-esteem, attachment, subjective well-being, anxiety, and depression were included in the outcome measures. The study found that the non-adopted sample showed better adjustment than those who were adopted. However, the majority of both groups fell within normal ranges on the adjustment measures.

The psychosocial adjustment of a group of young adults who had been adopted as children, was compared with that of a group of young adults who had been raised with their biological families (aged 20-35 years). Personality factors, interpersonal behavior styles, and social support networks were used to measure psychosocial adjustment (Haan-Alvarez & Johanna, 1990). The Sixteen Personality Factors Questionnaire, the Firo-B, and the Interpersonal Network Questionnaire were the instruments used. The findings suggest that nonadoptees were more intelligent than adoptees; however, the validity of this finding is questionable. The study concluded that young adult adoptees showed no difference in psychological adjustment when compared with nonadopted young adults. Adoptees seeking information about their backgrounds was viewed as normal rather than neurotic.

Ingersoll (1997) supports the view that genetic and environmental factors contribute to the manifestation of externalizing disorders that adopted children are prone to. Results indicate that adopted children are disproportionately represented in child psychiatric populations due to genetic as well as the pre-, peri-, and post-natal adverse environmental factors associated with adoption. The author suggests that professionals and parents not limit the psychiatric problems of adoptees to a single factor. Early intervention for children at risk is urged.

Kelly, Towner-Thyrum, Rigby, and Martin (1998) compared adopted and nonadopted college students. The purpose of the study was to identify family characteristics that predict successful adjustment and identity formation for young adult adoptees. The sample was made up of forty-nine (49) adopted and a randomly selected control group of forty-nine (49) nonadopted college students. The study found that

adoptees have been as successful as nonadoptees in achieving developmental tasks appropriate to their age.

Langbehn, Cadoret, Yates, Troughton, and Stewart (1998) focused on the predictive aspect of adult antisocial behavior. A descriptive multivariate statistical method was used to examine the relationship between individual symptoms of juvenile conduct and oppositional defiant symptoms to adult antisocial behavior. Genetic and environmental influences of having antisocial parents were separated. The data were drawn from a study by R. J. Cadoret. Findings support oppositional defiant disorder in adolescents as a biologically influenced phenomenon and predictive of adult antisocial behavior.

The psychosocial ramifications of infant adoptions vary between men and women. One study examines the psychosocial functioning of an unselected sample, from the National Child Development Study, of adopted, and nonadopted children born in Britain during the week of March 3-9, 1958. Interviews and questionnaires were used measure adult outcome. The study found that adopted women showed very positive adult adjustment in all areas; however, the study suggests that adopted men have difficulty in the employment and social support domains (Maughan, Collishaw, & Pickles, 1998).

A number of studies have explored the problems faced by adopted adults. In April 1954, fifty-eight (58) adopted adults were studied to see how adopted people experienced adoption, and the problems they encountered (McWhinnie, 1997).

Other studies have explored the relationship between adoptees and conduct disorders. A sample of children who attended outpatient psychiatric services over a fourteen year period were used to study the relationship between adoptive status and presenting psychopathology to demographic and psychosocial variables. One study found that adoptees were at increased risk of conduct disorders and Attention Deficit Hyperactivity Disorder (A.D.H.D.) (Moore, & Fombonne, 1999).

Various case studies have explored older child adoption functioning domains. A research program involving older child adoptions attempted to evaluate the post-placement readjustment process. Five domains of functioning (cognitions, resources, stressors, coping, relationship formation) were featured in the formulation of a theoretical model from a short-term longitudinal study currently

underway. Preliminary findings were presented as a case study (Pinderhughes, 1996).

Other studies have focused on the reaction of older adoptees to nontraditional family constellations. Conceptions of family and adoption in older adoptees and nonadopted peers were compared. One study found that older adoptees were more likely to accept nontraditional family constellations. Those adoptees who had more foster-care experience were more realistic regarding placement permanence (Sherrill, & Pinderhughes, 1999).

Certain life stressors affect personalities. Adoption is an early life stressor which affects the personality and subsequent life experiences of an individual. Smyer, Gatz, Simi, and Pedersen (1998) studied the long term impact of adoption on a sample of sixty (60) pairs of twins were taken from the Swedish Adoption/Twin Study of Aging. The twins were separated at an early age and reared apart. One member was raised by biological parents and the other by adoptive parents. Univariate and multivariate analyses were employed to assess factors associated with being raised in adoptive and non-adoptive homes. The results of the study show that there are few significant effects of adoption on adults. Childhood socioeconomic status appeared to mediate the stress of adoption. However, adoptees reported higher psychological stress.

Measurement instruments were sometimes developed to examine the emotional, cognitive, social, and academic development of children placed late for adoption. The selection of outcome measures used by the Maudsley Family Research team to assess outcomes in a broad range of developmental areas of permanent placement for children and adolescents is described. These instruments were developed for use with a longitudinal sample of children placed late for adoption (Rushton, 1998).

Other areas of research explore models for professionals seeking to provide an effective, affordable method of post-adoption search and reunion support services. In one such study, twenty-six people (26) participated in eight group counseling sessions facilitated by a social worker. The group was composed of people who were eighteen years and older, self-referred adoptive parents, adopted persons, or biological parents of an adopted person. Loss, loyalty, clarification of search and reunion concerns, helpfulness of the group, and negative feelings toward social workers were the five major themes that emerged in analyzing data from pre- and post intervention questionnaires and social worker process notes.

However, the helpfulness of the group experience over time was questionable (Valley, Bass, & Speirs, 1999).

Overall, there are few studies comparing adoptees with nonadoptees that do not utilize comparison groups that are either normative, clinical, or involve comparisons of adoptees with other adoptees. The present study constitutes an exploration of differences between adopted and nonadopted adults utilizing life history interviews and projective tests with the goal of exploring salient concerns for the adult adoptee.

METHODS

PARTICIPANTS

The sample consisted of 34 adults (26 females, 8 males), aged 21-44 from the Boston metropolitan area. Adoptees represented 53% and non-adoptees represented 47% of the sample. The adoptees were composed of those searching for their birth parents (n=13) and those not searching for their birth parents (n=5). The comparison group of non-adoptees were recruited via posted notices left at two universities and local area stores and were selected on the basis of matching demographic characteristics with the adopted group, including age, sex, marital status and educational level.

INSTRUMENTS

The TAT was analyzed for "Need for affiliation," as described by McClelland. He defined the "Need for Affiliation" as the desire to establish, restore or maintain a close relationship; concern over possible separation; or the desire to participate in convivial activities. The TAT was also analyzed for "Alienation," which refers to a distancing, either physically or emotionally, of one person from another through conscious effort or as the result of an external or emotional block to intimacy. "Alienation" was scored via an empirically derived scoring system, constructed by taking a random sample of five adoptee protocols and performing a thematic analysis. This analysis resulted in 13 frequently appearing themes included in the final system.

Loevinger's sentence Completion Test was used for measuring "Ego Stage." The concept of ego development, as conceptualized within this model, supposes a progression from an egocentric thought process toward a more holistic view of human beings.

The TAT and Ego Stage measures were chosen because they allowed quantitative comparisons to be made between the two groups using psychological measures that address the issues found in the literature review. In addition, the

projective nature of the tests allows maximum flexibility for participants to reveal their own concerns or issues without the constraints of a questionnaire or checklist which “suggests” the nature of the issues being sought.

In addition, the interview given to the adoptees after the administration of the tests allowed for more specific questioning and self-description of issues related to adoption. It also allowed for comparison of the issues stated during the interview with the material found in the projective tests for both groups.

PROCEDURES

In the adopted group, letters were sent to potential subjects from a member's list provided by the Orphan Voyage President. For those who did not respond immediately, phone calls were made two weeks later. A total of 18 eventually participated. Comparison group members who were volunteers were selected on the basis of matching demographic features including age, sex, marital status, and educational level with the adopted group.

Each subject met once with the investigator for approximately two hours during which general information and consent forms were completed followed by administration of either the TAT or Sentence Completion. These were alternated in order to control for order effects. For the adoptees, the testing phase was followed by administration of the life history interview in order to avoid contamination of the test material with issues aroused during the interview.

Each subject was asked to read carefully the instruction sheet attached to the front of the TAT. For the Sentence Completion Test, instructions were read verbatim from the Loevinger Manual as suggested in Appendix A of Volume 1 (Loevinger, 1970). During these periods, verbal interaction was kept to a minimum to avoid instrumentation bias introduced through variation in the test instructions.

DATA ANALYSIS/SCORING

This study utilized a combination of descriptive and inferential statistical analyses to compare the responses of adoptees and non-adoptees on two projective tests – the TAT and Loevinger's Sentence Completion Test. Life history interviews were also administered to the adoptees.

The TAT utilized six pictures depicting children either alone or with an adult in ambiguous contexts. It is hypothesized that these pictures will call forth salient concerns for the

adoptees, particularly with respect to early childhood experiences and relationships to adults, offering a contrast to the more neutral material anticipated from the comparison group. The TAT was scored using McClelland's (1972) Affiliation scoring system in which a story that passes one of his three “prime tests for the Affiliation Motive” is then scored “1” each time an additional theme is present in the story. An individual's score is the sum of all 1's (themes) that have been checked. A theme can only be checked once.

Alienation will be scored and summed similarly with the exception that there is no “prime test” for Alienation. Each theme is simply checked if it appears in a story. In addition, word counts were performed for key words found to correlate with overall Alienation scores.

The Ego Stage measure was scored by a trained rater. Inter-rater reliability for this measure has generally been in the .8-.9 range (Loevinger, 1978).

Two raters scored the TAT's due to the somewhat greater subjectivity of these scales. Inter-rater reliability for the TAT has ranged from .30-.96 (Tomkins, 1967). The great variability seems to derive from the diverse case material present in the stories, raters of varying ability, and differences in the conceptual and inferential frame-works utilized by the raters. Tomkins reports a variety of inter-rater reliability checks on the TAT with the majority falling into the .50-.70 range. He states that reliability frequently improves when raters are permitted to hash out their differences after scoring.

Inter-rater reliability for the present study for both alienation and affiliation fell within the acceptable range for this instrument. In some cases, total affiliation themes and total separation fears, inter-rater reliability exceeded .80. Even when reliability was somewhat lower for the same components of the scoring system, two-thirds of the reliability coefficients were higher than 0.50.

Figure 1

Table 1

Table 1		
Correlations with Adopted(-)/Nonadopted(+)		
	r	p
<u>Affiliation</u>		
Affiliation Themes	+ .3872	.012
-convivial activities	+ .3626	.018
Affiliation Imagery	+ .3307	.028
-goal activity	+ .2598	.069
-anticipate success	+ .3244	.031
-positive feeling	+ .3834	.013
-affiliation central plot	+ .3253	.030
Total Affiliation Score	+ .3409	.024
<u>Alienation</u>		
Negativity	-.3172	.034
-someone doesn't know	-.2662	.064
Separation Fear		
-someone is afraid	-.2623	.067
-someone is lonely	-.4001	.010
Education	+ .2648	.065

RESULTS AND CONCLUSION

TAT Affiliation ($p = .009$) and Alienation ($p = .003$) scores, the Ego Stage Measure total score, and the four demographic variables (age, gender, marital status, education) were correlated with adoption status (adopted or not). Ego Stage, age, gender and marital status were not significantly related to adoption status. However, several Affiliation scores (existence of an Affiliation theme, convivial activities, existence of Affiliation Imagery, anticipate success, positive feeling, and affiliation central plot) were significantly correlated with adoption status, with adoptees being lower on these scales. On the other hand, the Alienation scores (existence of Negativity, someone doesn't know, and someone is lonely) that were significantly correlated with adoption status were such that adoptees were higher on the scales than non-adoptees. (See Table 2.)

Figure 2

Table 2

Multiple Regression Analysis			
Independent Variables Block 1: Education Age Sex Marital Status			
Independent Variable block 2: Adopted/Nonadopted			
Scoring System	R ² Block 1	ΔR ² Block 2	p for ΔR ² Block 2
<u>Affiliation</u>			
- positive feeling	.276	.124	.032
<u>Alienation</u>			
Negativity	.148	.183	.015
- don't know	.216	.150	.022

In addition, a predictive discriminant analysis was conducted predicting adoption status from those above discussed variables that were significantly related to it (Table 3). The total predictive accuracy (84.9%, $z = 3.96$), as well as accuracies for the adoptees (88.9%, $z = 2.93$) and non-adoptees (80.0%, $z = 2.69$) were all significant ($p < .05$).

Figure 3

Table 3

		Predicted Group		
		Adoptees	Nonadoptees	Total
Actual Group	Adoptees	16	2	18
	Nonadoptees	3	12	15
Hit-rate		89%	80%	85%
Z-test		2.93**	2.69**	3.96**

Note. ** $p < .01$

Results supported the major hypothesis that adoptees would score higher than non-adoptees on Alienation variables and that non-adoptees would score higher than adoptees on Affiliation variables. As well, it was determined through a predictive discriminant analysis that classification into adoption status categories could be accomplished quite accurately from the set of variables that were significantly related to it. Qualitative analyses of interview questions

produced frequently appearing themes that amplify and extend the quantitative results.

Perhaps the most important contribution made by this study is an analysis couched in sound statistical techniques and based upon group comparisons of adoptees who are nonclinical with nonadopted matched controls. The use of regression and discriminant analysis as well as between group comparisons and descriptive statistics, provides an opportunity to examine adoption as a contributing factor in behavioral pathology after other factors have already been accounted for. One criticism frequently leveled at previous conclusions from adoptee research is that the psychological issues could result from any number of factors including those peculiar to any individual of that particular age, social class, or time period.

The thematic analyses of projective tests and life history interviews can illuminate areas for future research and stimulate further hypothesis generation; the eventual goal of all such research being the provision of a remodeled adoptive structure capable of supporting and protecting the rights, personal dignity, and humanity of all concerned with the adoption process. The present analysis represents another step into a hopefully continuing line of research into these issues.

References

- r-0. Brand, A.E., & Brinich, P.M. (1999). Behavior problems and mental health contacts in adopted, foster, and nonadopted children. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40, 1221-9.
- r-1. Brodzinsky, D.M. (1993). Long-term outcomes in adoption. *The Future of Children*, 3, 153-166.
- r-2. Cohen, J. & Westhues, A. (1995). A comparison of self-esteem, school achievement, and friends between inter-country adoptees and their siblings. *Early Childhood Development & Care*, 106, 205-224.
- r-3. Collishaw, S., Maughan, B., & Pickles, A. (1998). Infant adoption: Psychosocial outcomes in adulthood. *Social Psychiatry and Psychiatric Epidemiology*, 33, 57-65.
- r-4. Conditt, P.M. (1998). Psychoeducational group therapy with adult adoptees: The treatment of self-esteem. Doctoral dissertation, Theological Seminary, School of Psychology, (1998).
- r-5. Cubito, D. (1996). The psychological adjustment of a non-clinical sample of adult extra-familial adoptees. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 57(2-B), 1487.
- r-6. Cubito, D.S., & Brandon, K.O. (2000). Psychological adjustment in adult adoptees: Assessment of distress, depression, and anger. *American Journal of Orthopsychiatry*, 70(3), 408-413.
- r-7. Delmonaco, J. P. (1997). Adult adoptees perceptions of sameness to/difference from adoptive family: The relationship to self-concept and loss. *Dissertation Abstracts International: Section B: The Sciences & Engineering* Jun 1997, Vol 57 (12-B), 7765.
- r-8. Eldred, C.A. (1976). Some aspects of adoption in selected samples of adult adoptees. *American Journal of Orthopsychiatry*, 46, 279-90.
- r-9. Feigelman, W. (1997). Adopted adults: Comparisons with persons raised in conventional families. *Marriage and Family Review*, 25, 199-223.
- r-10. Fletcher, J. F. (1997). Correlates of psychosocial adjustment among adult adopted children. *Dissertation Abstracts International Section A: Humanities & Social Sciences* Jul 1997, Vol 58 (1-A), p 0290.
- r-11. Fletcher, J.F. (1997). Adult adoptees' perceptions of sameness to/difference from adoptive family: The relationship to self-concept and loss. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 57, 7765.
- r-12. Haan-Alvarez, & Johanna G. (1990). Psychosocial adjustment of adopted and nonadopted young adults: A comparative study. *Dissertation Abstracts International*, 51, (10B), 5050.
- r-13. Ingersoll, B.D. (1997). Psychiatric disorders among adopted children: A review and commentary. *Adoption Quarterly*, 1, 57-73.
- r-14. Kelly, M.M., Towner-Thyrum, E., Rigby, A., & Martin, B. (1998). Adjustment and identity formation in adopted and nonadopted young adults: Contributions of family environment. *American Journal of Orthopsychiatry*, 68, 497-500.
- r-15. Langbehn, D.R., Cadoret, R.J., Yates, W.R., Troughton, E.P., & Stewart, M.A. (1998). Distinct contributions of conduct and oppositional defiant symptoms to adult antisocial behavior: Evidence from an adoption study. *Archives of General Psychiatry*, 55, 821-829.
- r-16. Maughan, B., Collishaw, S., & Pickles, A., (1998). Infant adoption: Psychosocial outcomes in adulthood. *Social Psychiatry & Psychiatric Epidemiology*, 33 (2), 57-65.
- r-17. Maughan, B., Collishaw, S., & Pickles, A., (1998). School achievement and adult qualifications among adoptees: A longitudinal study. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 39, 669-685.
- r-18. McWhinnie, A.M. (1967). Adopted children: How they grow up. New York: Humanities Press, 3.
- r-19. Moore, J., & Fombonne, E. (1999). Psychopathology in adopted and nonadopted children: A clinical sample. *American Journal of Orthopsychiatry*, 69, 403-409.
- r-20. Pinderhughes, E. (1996). Toward understanding family readjustment following older child adoptions: The interplay between theory generation and empirical research. *Children and Youth Services Review*, 18, 115-138.
- r-21. Rushton, A. (1998). Measuring outcomes for children late placed for adoption. *Children & Society*, 12 (3), 190-191.
- r-22. Sharma, A.R., McGue, M.K., & Benson, P.L. (1996). The emotional and behavioral adjustment of United States adopted adolescents: Part I. an overview. *Children and Youth Services Review*, 18, 1-2, 83-100.
- r-23. Sharma, A.R., McGue, M.K., & Benson, P.L. (1996). The emotional and behavioral adjustment of United States adopted adolescents: Part II. Age at adoption. *Children and Youth Services Review*, 18, 101-114.
- r-24. Sharma, A.R., McGue, M.K., & Benson, P.L. (1998). The psychological adjustment of United States adopted adolescents and their non-adopted siblings. *Child Development*, 69, 791-802.
- r-25. Sherrill, C., & Pinderhughes, E. (1999). Conceptions of family and adoption among older adoptees. *Adoption Quarterly*, 2 (4), 21-47.
- r-26. Smyer, M.A., Gatz, M., Simi, N.L., & Pedersen, N.L.,

- (1998). Childhood adoption: Long term effects in adulthood. *Psychiatry*, 61, 191-205.
- r-27. Sobczak, J.M., (1988). A comparison of adult adoptees and nonadoptees on level of depression and quality of relationships with parents. *Dissertation Abstracts International*, 48(8-B), 2469-2470.
- r-28. Sobol, M.P., Delaney, S., & Earn, B.M., (1994). Adoptees' portrayal of the development of family structure. *Journal of Youth and Adolescence*, 23(3), 385-401.
- r-29. Valley, S., Bass, B., & Speirs, C., (1999). A professionally led adoption triad group: An evolving approach to search and reunion. *Child Welfare*, 78(3), 363-379.
- r-30. Wasserman, K.L., (1998). Approach-avoidance strategies among searching and nonsearching adoptees. *Dissertation Abstracts International: Section B: The Sciences & Engineering Sep 1998, Vol 59 (3-B)*, p 1381.

Author Information

Mary G. Lieberman

Florida Atlantic University

John D. Morris

Florida Atlantic University