

University of Pittsburgh School of Law
University of Pittsburgh School of Law Working Paper Series

Year 2003

Paper 71

Child Placement Decisions: The Relevance of
Facial Resemblance and Biological
Relationships

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Abstract

This article discusses two studies of evolution and human behavior addressing child-adult relationships and explores implications for policies and practices surrounding placement of children in foster homes. The first study indicates that men favor children whose facial features resemble their own facial features. This study may justify public child welfare decisionmakers in considering facial resemblance as they attempt to place children in safe foster homes. The second study indicates that parents are likely to invest more in children who are biologically related to them, thus enhancing their longterm well-being. Among other implications, this study may justify public child welfare decisionmakers in attempting to preserve biological families and avoid the removal of children from biological parents. It may also justify maintaining contact between biological parents and children even if removal is necessary.

Although this article recognizes that the studies do not provide for comprehensive decisionmaking rules, the article articulates how the studies can be used to incrementally construct, test, and improve policies and practices in a specific area of public activity.

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CITATION: David J. Herring, *Child Placement Decisions: The Relevance of Facial Resemblance and Biological Relationships*, 43 *Jurimetrics J.* 387–414 (2003).

The thesis of this article is that studies of evolution and human behavior provide useful insights for fashioning and implementing child placement policies and practices. This article utilizes two recent studies concerning child-adult

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relationships to contribute to the discussion of the policies and practices surrounding placement of children in foster family settings. The first study indicates the importance of carefully considering the facial resemblance of a placed child with any adult male present in the foster home. The second study indicates the importance of maintaining the relationship between a placed child and his or her biological parents.

Part I summarizes the two studies. Part II describes the current realities of public child welfare systems—systems within which child placement policies and practices are of paramount importance. Part III explores the implications of the two subject studies for policies and practices used for placing children in foster care.

I. TWO STUDIES OF HUMAN BEHAVIOR

Two recent studies conducted to test components of evolutionary theory relevant to parenting behavior form the core of this article.¹ This part articulates each study's hypotheses, describes the study's design and methodology, and presents the study's results.

A. Facial Resemblance Study

The first study tests the "paternal resemblance hypothesis."² This hypothesis states that adult men will favor children who look like them. Drawn from evolutionary theory, it presumes that the occurrence of cuckoldry creates a significant possibility that a man might invest in children to whom he is not biologically related. Caring for children who do not share his differential genetic material would not enhance his reproductive success.³

Because of this possibility, an adult man has a strong interest in increasing the probability that the child he is caring for shares his genetic material.⁴ There are two approaches he can use. First, he can monitor or sequester the woman he wants to bear his children, reducing the risk of cuckoldry.⁵ Second, he can try to assess paternity after a child is born based on the degree to which the child resembles him in terms of facial and other physical features.⁶ The second strategy leads a man to favor a child that resembles him. Several studies indicate that men

1. Steven M. Platek et al., *Reactions to Children's Faces: Resemblance Affects Males More Than Females*, 23 *EVOLUTION & HUM. BEHAV.* 159 (2002); Anne Case et al., *Educational Attainment of Siblings in Stepfamilies*, 22 *EVOLUTION & HUM. BEHAV.* 269 (2001).

2. See Platek et al., *supra* note 1, at 160.

3. See *id.* at 159–60. Reproductive success is a measure of the degree to which a specific individual's differential genes are replicated in successive generations. Only individuals who are biologically related can enhance each others' reproductive success. See TIMOTHY H. GOLDSMITH & WILLIAM F. ZIMMERMAN, *BIOLOGY, EVOLUTION, AND HUMAN NATURE* 125–36 (2001).

4. A woman does not face this risk—she has given birth to the child and is much more certain that the child she is caring for is biologically related to her.

5. Platek et al., *supra* note 1, at 159–60.

6. *Id.* at 160.



use this strategy and that the hypothesized favoritism results.⁷ For example, a study involving men convicted of domestic violence found that the more men perceived that their children resembled them, the better the men treated their children.⁸ Other studies have shown that men are more likely to abuse stepchildren, or otherwise unrelated children.⁹ Another set of studies reveal that mothers, and their friends and relatives in maternity wards, are more likely to comment on children's resemblance to their fathers than to their mothers or other family members.¹⁰ Based on these latter studies, researchers theorize that mothers, friends, and relatives are unconsciously, yet strategically, attempting to reinforce fathers' perceptions of resemblance in order to secure full paternal investment.¹¹

To test the paternal resemblance theory more directly and rigorously, researchers experimentally manipulated adult-child resemblance. Their study manipulated facial resemblance through computerized facial morphing, or mixing, and determined the adult subjects' reactions by questions concerning aspects of parental investment.¹²

The researchers photographed 40 undergraduate students. Using computer software, each subject's picture was morphed with the pictures of either a two-year-old girl or boy. The resulting image represented a 50:50 combination of the subject and the child.¹³

The researchers showed each subject "five faces on a computer screen arranged in a semicircular array with a question embedded in the middle" (for example, "which one of these children do you find to be the most attractive?").¹⁴ The subjects viewed two separate arrays ten times, selecting one image in response to each of ten separate questions.¹⁵ The first array included one image of the subject morphed with a child's face and four images of other adults

7. See *id.*; Rebecca L. Burch & Gordon G. Gallup, Jr., *Perceptions of Paternal Resemblance Predict Family Violence*, 21 *EVOLUTION & HUM. BEHAV.* 429 (2000); Kermyt G. Anderson et al., *Parental Care by Genetic Fathers and Stepfathers I: Reports from Albuquerque Men*, 20 *EVOLUTION & HUM. BEHAV.* 405 (1999); Kermyt G. Anderson et al., *Paternal Care by Genetic Fathers and Stepfathers II: Reports by Xhosa High School Students*, 20 *EVOLUTION & HUM. BEHAV.* 433 (1999) [hereinafter *Stepfathers II*]; Martin Daly & Margo I. Wilson, *Violence Against Stepchildren*, 5 *CURRENT DIRECTIONS IN PSYCHOL. SCI.* 77 (1996) [hereinafter *Daly & Wilson, 1996*]; Martin Daly & Margo I. Wilson, *Some Differential Attributes of Lethal Assaults on Small Children by Stepfathers versus Genetic Fathers*, 15 *ETHOLOGY & SOCIOBIOLOGY* 207 (1994).

8. Burch & Gallup, *supra* note 7.

9. *Stepfathers II*, *supra* note 7; Daly & Wilson, 1996, *supra* note 7.

10. Martin Daly & Margo I. Wilson, *Whom Are Newborn Babies Said to Resemble?*, 3 *ETHOLOGY & SOCIOBIOLOGY* 69 (1982); Jeanne M. Regalski & Steven J.C. Gaulin, *Whom Are Mexican Infants Said to Resemble? Monitoring and Fostering Paternal Confidence in the Yucatan*, 14 *ETHOLOGY & SOCIOBIOLOGY* 97 (1993).

11. See Daly & Wilson, *supra* note 10.

12. *Id.* at 160–62.

13. *Id.* at 161. One set of ten male subjects and ten female subjects were morphed with a female child, while another set of ten male subjects and ten female subjects were morphed with a male child. *Id.*

14. *Id.*

15. *Id.*



morphed with the same child's face.¹⁶ The second array included five images of other adults morphed with the child's face.¹⁷

The researchers posed the ten questions to assess the subjects' attitudes toward, and likely treatment of, the pictured children.¹⁸ The subjects selected one child's face in response to questions such as the following: "Which one of these children would you be most likely to adopt? Which one of these children do you find to be the most attractive?"¹⁹ The researchers recorded both the subjects' responses and response times.²⁰ They also asked the subjects to explain how they made their choices and whether it had been difficult to choose one face from each array.²¹

The researchers found that the sex of the child had no effect,²² but, the sex of the adult subject did:

When subjects were shown their own faces morphed with a child's in an array of four other people's faces morphed with that child, males were more likely to choose the face that resembled their own as the one they would be most likely to adopt, the most attractive, the child they would spend the most time with, the child they would spend money on, and the child they would least resent having to pay child support for.

Unlike males, females were relatively indifferent to whether the children's faces resembled their own. There were no questions where females were more likely than males to choose a face that they had been morphed with. In fact, females took longer to respond to all questions, and more women than men expressed difficulty in choosing faces. Whereas in self-morph arrays males chose which child to support or punish quickly and easily, females took longer to deliberate and attempted to distribute their choices across faces.²³

The actual percentages in response rates bring to life the differences summarized by the researchers. Ninety percent of the men picked their self-morph in designating the child they would most likely adopt, while only 35% of the women chose their self-morph.²⁴ Eighty-five percent of the men, but only 35% of

16. *Id.*

17. *Id.* The positions of specific faces within each array were randomized among questions so that no face appeared in the same position repeatedly. *Id.* at 161–62. In addition, the researchers sampled the two arrays randomly until each question had been presented within each array. *Id.*

18. *Id.* at 160.

19. *Id.* at 163. Additional questions asked: "Which one of these children would you be comfortable spending the MOST time with? Which one of these children would you spend the LEAST time with? Which one of these children would you spend \$50 on if you could only spend it on one child? Which one would you spend \$50 on last? If one of these children damaged something valuable of yours, which one would you punish MOST? Which one would you punish LEAST? If you were forced to pay child support to these children, which one would you MOST resent having to pay child support for? Which one would you LEAST resent having to pay child support for?" *Id.*

20. *Id.* at 162.

21. *Id.*

22. *Id.*

23. *Id.* at 164–65.

24. *Id.* at 163.

the women, chose their self-morph in identifying the most attractive child.²⁵ Seventy percent of the men and 35% of the women designated their self-morph as the child they would be comfortable spending the most time with.²⁶ Eighty percent of the men and 40% of the women identified their self-morph as the child they would spend \$50 on.²⁷ Forty percent of the men and 25% of the women picked their self-morph as the child they would least resent having to pay child support for. Finally, none of the men chose their self-morph as the child they would punish most, while 15% of the women selected their self-morph.²⁸ These response rates reveal both the significant difference between the sexes concerning the impact of adult-child resemblance, and the substantial importance of resemblance to men in how they perceive and react to specific children.²⁹

Findings for the array including self-morphs differed from the findings for the array that did not include self-morphs.³⁰ For this second array of faces, “there were no sex differences in the likelihood of selecting any particular face.”³¹ In addition, both men and women apparently chose faces from the second array at random.³²

A final important aspect of the study was the subjects’ lack of awareness of the effect of resemblance on their choices.³³ There was little consensus among the subjects on how they selected faces.³⁴ In particular, “[w]hen queried about their choices at the conclusion of the experiment, none identified resemblance as a factor in how they chose which child to support or punish, nor did they even realize that their faces had been morphed with the child.”³⁵ To underscore the unconscious nature of the effect of resemblance on the subjects’ choices, the researchers pressed further:

During debriefing, subjects were told that their face had been morphed with some of the faces, and they were given the opportunity to view the faces again. But none could pick their self-morph out of the array. It was not until the real, unmorphed picture of the subject and the self-morph were aligned next to each other on the computer screen that they could identify their morph, and subjects expressed surprise that they had been unable to see their own features embedded in the face of the child.³⁶

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.* at 164–65.

30. *Id.* at 164.

31. *Id.*

32. *Id.*

33. *Id.* at 165.

34. *Id.*

35. *Id.*

36. *Id.*



Of course, the results of the study indicate that the male subjects were able, at some level, to “see” their own features embedded in a particular child’s face.³⁷ Although not a fully conscious perception, it was powerful.³⁸

The researchers end their discussion of the study by bringing to bear concepts drawn from human evolutionary history.³⁹ Their primary finding, that resemblance plays a greater role in how males react toward children, is consistent with the literature regarding treatment of unrelated children and how paternal resemblance influences child abuse and investment.⁴⁰

Whatever the concepts and theories that help explain the study’s findings, the data suggest that facial resemblance is a factor in determining men’s reactions to particular children.⁴¹ The data also suggest that the use of the resemblance factor operates at a relatively unconscious level.⁴² However, the study does not show how the resemblance factor manifests itself in actual behavior towards specific children. It establishes neither the specific manner nor the extent to which physical resemblance affects adults’ interactions with children. Despite these unanswered questions, the research holds out the possibility of important practical implications that policymakers could consider immediately, for example, in adoption policy.⁴³

B. Biological Relationship Study

The second study tests two hypotheses.⁴⁴ The first hypothesis is that parents invest less in their nonbiological children than in their biological children.⁴⁵ This hypothesis arose from the research related to children from stepparent families.⁴⁶ In terms of educational attainment, employment, marriage, and mental health, these children fare just as poorly as children from single-mother families, who in turn fare much worse than children in homes with both of their biological parents, largely due to differences in socioeconomic status.⁴⁷

These earlier findings gave rise to an interesting mystery:

Given that income accounts for much of the disadvantage associated with single parenthood, and that stepfamilies are similar to original two-parent families in

37. *Id.*

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. *Id.*

43. *Id.*

44. Case et al., *supra* note 1, at 270–71.

45 This study effectively defined parental investment as the provision of effort and resources to secure child well-being, as measured by such criteria as expenditures on food, health care, education, and the avoidance of abusive or neglectful behavior. *Id.*

46. *Id.*; Timothy J. Biblarz & Adrian E. Raftery, *Family Structure, Educational Attainment, and Socioeconomic Success: Rethinking the “Pathology of Matriarchy,”* 105 AM. J. SOC. 321 (1999); SARA McLANAHAN & GARY SANDEFUR, *GROWING UP WITH A SINGLE PARENT* (1994).

47. Case et al., *supra* note 1, at 270–71.

terms of their socioeconomic status, sociologists and economists would expect children in stepfamilies to be doing about as well as children in original two-parent families. Yet, they are not. Indeed, once income is taken into account, children in stepfamilies generally do worse than children in single-mother families.⁴⁸

In confronting this mystery, the researchers hypothesized that parents invest less effort and resources in nonbiological children such as stepchildren, and that this lesser investment results in worse outcomes.⁴⁹

In forwarding this first hypothesis, the researchers recognized that three other explanations have been proposed as to why children in stepfamilies do worse than children in original two-parent families. One idea is that “adults who divorce and remarry are less [competent] as parents than adults who remain married.”⁵⁰ Therefore, the problem is not related to stepfamily structure and functioning *per se*, but is due to the type of person who divorces and remarries.⁵¹ Another possibility is that stepfamilies lack affirmative social supports and norms that fully recognize their parent-child relationships.⁵² This situation arguably undermines parental authority and obligation toward children in stepfamilies, causing negative outcomes.⁵³ Finally, stepchildren may do worse because they have been scarred by their experiences surrounding parental divorce and separation.⁵⁴ The researchers questioned the third alternative hypothesis because it failed to explain why stepchildren fare worse than children who have experienced divorce, but are raised in single-parent families.⁵⁵ The researchers designed their study to test the remaining two alternative explanations.

The researchers’ second hypothesis is that mothers invest in their biological children to a much higher degree than fathers.⁵⁶ Sociologists and economists have begun to compare the effects of mother absence and father absence.⁵⁷ One recent national study showed that mother absence was much more detrimental to a child than father absence.⁵⁸ Once socioeconomic status was taken into account, children raised by single mothers fared as well as those raised by both birth parents, and much better than children raised by single fathers or by fathers and stepmothers.⁵⁹ Based on this study and several others with consistent findings, the researchers designed their study to rigorously examine the effects of mother absence and father absence.⁶⁰

48. *Id.* at 270.

49. *Id.*

50. *Id.*

51. *Id.*

52. *Id.*

53. *Id.*

54. *Id.*

55. *Id.*

56. *Id.* at 270–71.

57. *Id.* at 270.

58. *Id.*; Biblarz & Raftery, *supra* note 46.

59. Case et al., *supra* note 1, at 270.

60. *Id.* at 271–72.



In testing both of their hypotheses, the researchers examined the relative parental investments made in children by comparing the educational attainment of birth and nonbirth children reared in the same two-parent families.⁶¹ This approach allows the study to significantly extend previous research comparing the children of different mothers because it allows for a comparison of children within the same family whose relationship with their mother differs among them (that is, birth, step, adoptive, foster).⁶² The results yield an account of the relative investment made by the same parents in children whose genetic relationship to them varies.⁶³

The researchers' approach also adopted a measure of parental investment that arguably reflects this investment throughout childhood.⁶⁴ Educational attainment usually culminates in early adulthood, at least in part the product of sustained parental investment from infancy through adolescence. Measured differences in this outcome may identify consistent, sustained differences in parental investment.⁶⁵

The researchers included all individuals who were ever a birth, adoptive, step, or foster child during the years from 1968 to 1985.⁶⁶ The researchers assigned individuals to specific categories based on their relationship to each of their parents (for example, birth mother, adoptive father; stepmother, birth father).⁶⁷ The researchers utilized a detailed coding system for assigning children to particular parental permutations and verified the reasonableness of this assignment method by using alternative assignment methods that reached similar results.⁶⁸

61. *Id.* at 271.

62. *Id.*

63. *Id.*

64. To implement this approach, the researchers used data from the United States Panel Study of Income Dynamics, a large longitudinal study of individuals and families that has interviewed subject household members annually since 1968. *See id.* at 272. The original sample included 4,800 households. *Id.* In the late 1990s, it had grown to include over 6,000 households. *Id.*

65. *Id.* at 272.

66. *Id.*

67. *Id.*

68. *Id.* at 273–75. The researchers' primary assignment method relied on a hierarchy of attachment between parent and child. Children who lived with their birth mothers exclusively were classified as being raised by birth mothers. For all other children, the researchers viewed the attachment between child and parent as strongest for adopted children, less strong for stepchildren, and weakest for foster children. Thus, children who lived with a foster mother, but not an adoptive or stepmother, were classified as being raised by a foster mother. Children who lived with a stepmother for any time, but not an adoptive mother, were classified as being raised by a stepmother, and children who lived with an adoptive mother for any time were classified as being raised by an adoptive mother.

This assignment method raises the question of whether the study's results are affected by the inevitable differences in the ages of children at the point of disruption from their birth mother and in the length of time spent with the mother with whom they are classified. For example, a child who goes into foster care for one month at age 17 is classified as being raised by a foster mother, just like a child who goes into foster care at birth and remains there until age 18.



The study yielded several interesting findings. The researchers first presented a comparison of the mean number of years of educational attainment.⁶⁹ They compared distinct groups of households that included more than one child.⁷⁰ These comparisons revealed no statistically significant difference in the educational attainment of children raised by their birth mothers, regardless of whether these women also raised stepchildren, adoptive children, foster children, or only birth children.⁷¹ However, on average, nonbirth children raised with birth children completed significantly less formal education.⁷² In households with stepchildren and birth children, the stepchildren obtained .75 years less schooling.⁷³ In those with adoptive children and birth children, the adoptive children obtained .62 years less schooling.⁷⁴ In households with foster children and birth children, the foster children obtained 1.33 years less schooling.⁷⁵ The researchers concluded, “[w]e cannot reject that the step, adopted, and foster children all complete 1 year less schooling, on average.”⁷⁶

The researchers recognized that there may be family structure factors other than the type of mother who raised the child that determine the child’s educational attainment.⁷⁷ They designed their study to test for these other possible factors.⁷⁸ When the researchers compared birth and nonbirth children of the same mother, the only factors that had a significant impact on children’s educational attainment were the relationship between child and mother, the presence of the birth father in the home, and whether the child was the oldest child being raised by the mother.⁷⁹ Consistent with the initial comparison, step, adoptive, and foster children completed approximately one year less education than birth children in the same household.⁸⁰ Children in households that included their birth father

The researchers expressly realize that their assignment method is ad hoc and recognize the potential problems for their study. Accordingly, they checked the robustness of their method by using alternative methods. One such alternative method was to assign children to the type of mother they had lived with for the longest period. This alternative appears to address, at least in part, the point raised above. The researchers conclude, “The assignments of mothers and fathers change very little using this alternative rule, and our results are robust to this alternative assignment.” *Id.* at 273.

69. *Id.* at 276 tbl. 2.

70. *Id.* at 275. One group consisted of households that included birth children and stepchildren, another included households with birth children and adopted children, a third group included households with birth children and foster children, and a fourth included households with only birth children.

71. *Id.* at 275–76.

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.* at 275.

77. *Id.* at 276.

78. *Id.* at 275–76. The researchers performed additional analyses that measured the effect of the mother’s level of education, the father’s level of education, the number of children raised by the mother, birth order indicators for specific children in the household, the child’s sex, the household’s socioeconomic status, and whether the child’s birth father was present in the home.

79. *Id.* at 277–78.

80. *Id.*



appeared to complete .5 years more education than children in households that did not include their birth father, and the mother's oldest child appeared to complete .2 years more education than younger children in the same household.⁸¹ Thus, the strongest indicator of educational attainment was a child's biological relationship with the mother in the household.

The researchers examined the impact of birth fathers further because, although the *prima facie* evidence indicated that they had only one-half of the effect of birth mothers on children's educational attainment, their effect was significant.⁸² Specifically, the researchers compared outcomes for children who were raised by six types of parental pairs: birth mother and birth father, birth mother and stepfather, birth mother and adoptive father, stepmother and birth father, adoptive mother and birth father, and foster mother and foster father.⁸³ This analysis revealed that children in households with their birth mother did not vary significantly in terms of educational attainment.⁸⁴ The researchers concluded that "father types do not have a significant effect on educational attainment," while in contrast, "a child raised by a step, adoptive, or foster mother is at risk for lower educational attainment as compared with a child raised by a birth mother."⁸⁵

The researchers also considered prior studies indicating that adopted children receive a level of parental investment similar to birth children.⁸⁶ Prior studies had examined only one child per household, making comparisons only across households, not within.⁸⁷ When the researchers in the immediate study completed a similar comparison, they found that adopted children's educational attainment is not significantly different from that of birth children (12.81 years).⁸⁸ This finding is consistent with the findings of the prior studies. However, this finding masks an important difference between households with and without birth children: "When a woman raises adopted children but no birth children of her own, on average, her adopted children obtain 13.29 years of schooling. On the other hand, if a woman is raising birth children and adopted children, on average, the adopted children receive 12.16 years of schooling."⁸⁹

The researchers use this last finding to bolster their study's strong support for the first hypothesis tested in the study—that parental investments are lower and childhood outcomes are poorer for nonbirth children than for birth children raised in the same household by the same parents.⁹⁰ This finding is consistent with Daly and Wilson's concept of discriminative parental solicitude that grew out of their

81. *Id.*

82. *Id.* at 278.

83. *Id.* at 280.

84. *Id.* at 280–82.

85. *Id.* at 280–81.

86. *Id.* at 278.

87. *Id.*; Anne Case & Christina Paxson, *Mothers and Others: Who Invests in Children's Health?*, 20 J. HEALTH ECON. 301, 316 (2001).

88. Case et al., *supra* note 1, at 278.

89. *Id.* The birth children in the latter type of household receive, on average, 12.78 years of schooling. *Id.* at 276.

90. *Id.* at 283.



finding that stepparents are selective in their abuse, abusing their stepchildren but not their birth children.⁹¹ The researchers note that this concept

may help to explain the difference in educational attainment between adopted children raised with a woman's birth children and those raised with only other adopted children. The "child-specific love and commitment" toward adopted children may be greater on the part of parents who have had no birth children of their own.⁹²

The study also strongly supports the researchers' second hypothesis—that mother absence is more important than father absence, both in terms of investments made in children and in terms of child outcomes.⁹³ In concluding, the researchers point out that "[c]hildren raised by adoptive fathers or stepfathers are not at risk for lower educational attainment, provided that they are raised by their birth mothers, while children raised by stepmothers are at risk—even when their birth fathers are present."⁹⁴ They note that the finding that mothers play a more important role than fathers in child rearing is consistent with prior studies in the area of human behavior and with attachment theory and ecological theory.⁹⁵

The researchers also note that their findings rebut, or at least question, the three other hypotheses that attempt to account for studies that reveal the poor outcomes for children in stepfamilies.⁹⁶ To reject two of the three alternative hypotheses (that adults who divorce and remarry are less effective or competent as parents and that stepfamilies lack the support and social norms that encourage parental obligations to children), they point specifically to the finding that birth children raised by women also raising nonbiological children obtain the same level of education as birth children of women raising only birth children, whereas nonbiological children raised by the former set of women obtain significantly less education.⁹⁷ The researchers state,

If stepmothers were, on average, less able mothers, or if stepchildren obtained less schooling because of a lack of clear norms in stepfamilies, then we would expect to see the birth children of a woman with stepchildren also obtaining less education. However, this is not what we observe.⁹⁸

The researchers acknowledge that their findings do not undermine the remaining competing hypothesis as powerfully, but they do call it into question.⁹⁹ This hypothesis holds that children who live apart from their birth mothers are

91. MARTIN DALY & MARGO WILSON, THE TRUTH ABOUT CINDERELLA: A DARWINIAN VIEW OF PARENTAL LOVE 26–36 (1998).

92. Case et al., *supra* note 1, at 284.

93. *Id.* at 283.

94. *Id.* at 285.

95. *Id.*; *see also* JOHN BOWLBY, A SECURE BASE: PARENT-CHILD ATTACHMENT AND HEALTHY HUMAN DEVELOPMENT (1988); URIE BRONFENBRENNER, THE ECOLOGY OF HUMAN DEVELOPMENT: EXPERIMENTS BY NATURE AND DESIGN (1979).

96. Case et al., *supra* note 1, at 271–72.

97. *Id.*

98. *Id.*

99. *Id.* at 284.



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scarred in some way that results in less educational attainment.¹⁰⁰ This hypothesis is weakened by the finding that adopted children in families that do not include biological children of the mother obtain a higher level of education than birth children, whereas adopted children in families that include a mother's biological children obtain significantly less education.¹⁰¹ The researchers conclude,

We cannot rule out the scarring hypothesis, but we offer some evidence that makes it seem less likely. First, children who are adopted into families with only adopted children would have to be less scarred than children adopted into families where there are birth children of the mother present, since the former obtain more education than birth children raised alone, while the latter obtain less education.¹⁰²

Although the researchers cannot rule out this scenario, it appears unlikely.¹⁰³

In the end, the study supports the researchers' two hypotheses; parents favor their biological children, and mother absence is more important than father absence.¹⁰⁴ However, there are several caveats to this conclusion. First, the researchers measured educational attainment at three points, asking separately whether subject children completed at least 12 years, 14 years, and 16 years of education.¹⁰⁵ They found that "being raised by an adoptive, step, or foster mother has no significant effect on the probability" of completing 12 years of education (that is, finishing high school).¹⁰⁶ The significant negative effects occurred during the transition from high school to college, with children raised by a nonbiological mother having a 20% to 30% reduced probability of completing 14 years of education.¹⁰⁷

The researchers address the finding that living with a birth mother is protective of college attendance and what it means for assessing parental investment:

Completion of high school may not be a very strong indicator of a child's skills or knowledge in the United States, where most children are graduated if they stay in school. College attendance is apt to be a better measure of academic strength. Children raised with birth mothers may be better students, having received more scholastic help from their mothers during primary and secondary schooling.¹⁰⁸

For the researchers, whether a child attends college reflects the degree of parental investment throughout childhood, something that is not as dramatically apparent during high school years.¹⁰⁹

100. *Id.*

101. *Id.* at 284–85.

102. *Id.* at 284.

103. *Id.*

104. *Id.* at 283.

105. *Id.* at 278–80.

106. *Id.* at 279.

107. *Id.*

108. *Id.* at 279–80.

109. *Id.*



The researchers note one other possible explanation for the differences in educational attainment emerging at the point of transition from high school to college; children raised by nonbirth mothers may have more difficulty paying for college.¹¹⁰ Initially, they view this as a complementary explanation for their findings, stating, “[o]ur results are consistent with a model in which women are more willing to invest in their birth children’s college education.”¹¹¹ But they then acknowledge that the stepfamily structure may account for this finding, apart from the hypothesis of differing levels of parental investment.¹¹² They note that college scholarship rules may discriminate against stepfamilies by counting the income of the absent parent in determining need.¹¹³ However, they note that this factor does not account for the finding that the effect of living with stepfathers is much less than living with stepmothers, or the finding of negative outcomes for adopted children who do not have absent parents.¹¹⁴

These last points provide a powerful rebuttal to the alternative explanation of their findings. The stepfamily structure does not fully explain the differences in educational attainment that emerge at the point of transition to college. But, there may be other explanations for specific differences. For example, one would expect foster children to experience severe difficulty in securing college attendance due to a lack of financial and other support, regardless of how much their foster parents had previously invested in them.¹¹⁵ It is not clear that differences in parental investment throughout childhood provide the only, or even the most powerful, explanation for the study’s findings.

Another caveat to the researchers’ conclusions arises from their apparent assumption that genetic differences among children do not explain the differences in educational attainment. For example, children who experience step, adoptive or foster family environments may tend to have genetic characteristics that result in lower levels of educational attainment.¹¹⁶ The researchers assume that these genetic differences do not explain their results and that differences in parental investment do.

110. *Id.* at 280.

111. *Id.*

112. *Id.*

113. *Id.*

114. *Id.*

115. See Julee Newburger, *From Foster Care to College Life*, Connect for Life, at http://www.connectforkids.org/content1552/content_show.htm?attrib_id=315&doc_id=54403#new (last visited July 24, 2003); Pearl Y. Martin & Sonia Jackson, *Educational Success for Children in Public Care: Advice from a Group of High Achievers*, 7 CHILD & FAM. SOC. WORK 121, 121–23, 127 (2002); Sonia Jackson & Pearl Y. Martin, *Surviving the Care System: Education and Resilience*, 21 J. ADOLESCENCE 569, 570–73, 577 (1998).

116. For a discussion of the importance of genetic characteristics to personality and cognitive development and the advisability of designing research projects that identify and account for genetic factors, see Robert Plomin & Denise Daniels, *Why Are Children in the Same Family So Different from One Another?*, 10 BEHAV. & BRAIN SCI. 1, 2–6 (1987); Robert Plomin et al., *Why Are Children in the Same Family So Different? Nonshared Environment a Decade Later*, 46 CANADIAN J. PSYCHIATRY 225 (2001); JUDITH RICH HARRIS, *THE NURTURE ASSUMPTION: WHY CHILDREN TURN OUT THE WAY THEY DO* 33–53 (1998).



The researchers may be correct in their assumption. They point to previous studies that measure lower parental investment in nonbiological children in terms of food and health care.¹¹⁷ While these studies identify differences in parental investment, they do not establish that lower parental investment necessarily causes worse outcomes. Genetic factors may cause worse outcomes, such as lower educational attainment, for nonbiological children.¹¹⁸ Again, this possibility does not necessarily refute the researchers' conclusions, but it does call for additional studies, especially studies that include sophisticated analyses of genetic factors (for example, twin studies).

One focus of future research should be additional comparisons within household types. For example, the researchers' finding that adopted children fare better with a mother who does not have any biological children in the household has potentially important policy implications.¹¹⁹ A future study could allow for a similar comparison between foster children with mothers who have no biological children in their homes and foster children in homes with the mother's biological children. Such a comparison could be useful in formulating policies for foster placement.

Future studies could also utilize outcome measures other than educational attainment. Especially for foster children, educational attainment may not be an appropriate outcome measure that indicates the level of parental investment. Foster parents are under contract with the state until the foster child turns 18, at which time the legal relationship is terminated at the critical high school to college transition stage.¹²⁰ Measures of health and safety outcomes, employment outcomes, and criminal activity outcomes may be more appropriate and provide additional insight into the relative levels of parental investment in specific households.

The caveats related to the second study, and the need to conduct additional studies to verify and extend the findings of both studies described above, make it clear that the two studies provide only a small piece of a comprehensive examination of parental behavior and investment. Nonetheless, the hypotheses supported by these studies appear to provide important insights into human behavior surrounding parenting. In terms of caring for, investing in a specific child, and avoiding abusive behavior, it is important to men that the child have a physical resemblance to them.¹²¹ Consistent with this finding, a parent will favor a biological child in making particular caretaking investments.¹²² Thus, children suffer when their biological parent is absent from their household, and this

117. Case et al., *supra* note 1, at 271; Anne Case et al., *Household Resource Allocation in Stepfamilies: Darwin Reflects on the Plight of Cinderella*, 89 AM. ECON. REV. 234 (1999) [hereinafter Case et al., 1999]; Anne Case et al., *How Hungry Is the Selfish Gene?*, 110 ECON. J. 781 (2000) [hereinafter Case et al., 2000]; Case & Paxson, *supra* note 87.

118. *See supra* note 116.

119. *See* Case et al., *supra* note 1, at 278.

120. *See generally* Newburger, *supra* note 115; Martin & Jackson, *supra* note 115.

121. *See* Platek et al., *supra* note 1, at 164.

122. *See* Case et al., *supra* note 1, at 271, 283.



negative effect is especially pronounced when a child's biological mother is absent.¹²³

II. FOSTER CARE REALITIES AND POLICIES

There are many reasons to worry about children placed in foster care by public child welfare agencies. A primary concern is the increased risk of abuse and neglect faced by foster children. Several studies during the past two decades have revealed that the incidence of abuse and neglect is much higher for foster children than for children in the general population.¹²⁴ One commentator summarizes some of these findings:

A 1986 study conducted by the National Foster Care Education Project found that foster children were ten times more likely to be abused than children among the general population. A follow-up study in 1990 by the same group produced similar results. A 1992 Maryland study found that the number of substantiated allegations of sexual abuse in foster care was four times higher than among the general population. Numerous surveys, many of which were conducted as part of civil lawsuits against a particular jurisdiction's foster care system, reveal astoundingly high incidences of abuse and neglect within foster care.¹²⁵

Foster parents were the alleged abusers in most of the reported cases of foster child abuse.¹²⁶ Although the public agency substantiated a lower percentage of the allegations against foster parents, the risk of having a substantiated report was significantly higher in foster care than in the general community.¹²⁷ Thus, foster children face considerable risks of being maltreated—risks that significantly exceed those faced by nonfoster children.

The studies of maltreatment in foster care reveal that foster children placed with kin face less risk of maltreatment.¹²⁸ They also reveal that the majority of abusers are men, with one set of researchers finding that almost two-thirds of

123. *See id.* at 283.

124. *See* Mary I. Benedict et al., *Types and Frequency of Child Maltreatment by Family Foster Care Providers in an Urban Population*, 18 *CHILD ABUSE & NEGLECT* 577 (1994) [hereinafter Benedict et al., 1994]; Mary I. Benedict et al., *The Reported Health and Functioning of Children Maltreated While in Family Foster Care*, 20 *CHILD ABUSE & NEGLECT* 561 (1996) [hereinafter Benedict et al., 1996]; Martin Daly & Margo Wilson, *Child Abuse and Other Risks of Not Living with Both Parents*, 6 *ETHOLOGY & SOCIOBIOLOGY* 197 (1985); Georgina F. Hobbs et al., *Abuse of Children in Foster and Residential Care*, 23 *CHILD ABUSE & NEGLECT* 1239 (1999); Brian Minty & Sheila Bray, *Allegations Against Foster Carers: An In-Depth Study*, 10 *CHILD ABUSE REV.* 336 (2001); Michael A. Nunno & Janet K. Motz, *The Development of an Effective Response to the Abuse of Children in Out-of-Home Care*, 12 *CHILD ABUSE & NEGLECT* 521 (1988); James A. Rosenthal et al., *A Descriptive Study of Abuse and Neglect in Out-of-Home Placement*, 15 *CHILD ABUSE & NEGLECT* 249 (1991); Susan J. Zuravin et al., *Child Maltreatment in Family Foster Care*, 63 *AM. J. ORTHOPSYCHIATRY* 589 (1993).

125. *See* Jill Chaifetz, *Listening to Foster Children in Accordance with the Law: The Failure to Serve Children in State Care*, 25 *N.Y.U. REV. L. & SOC. CHANGE* 1, 7 (1999) (footnotes omitted); *see also* DOROTHY ROBERTS, *SHATTERED BONDS: THE COLOR OF CHILD WELFARE* (2002).

126. *See* Benedict et al., 1994, *supra* note 124, at 582.

127. *See id.*

128. *See* Benedict et al., 1996, *supra* note 124, at 565.



perpetrators were male.¹²⁹ Many of the researchers note that foster families face especially high stress and pressure in dealing with foster children and public agency caseworkers.¹³⁰ They speculate that this may be a significant factor leading to maltreatment.¹³¹ These researchers generally conclude that their findings indicate the very real risks foster children face, the need to support and monitor foster care placements actively and carefully, and the need to develop more sophisticated policies.¹³²

Detailed written policies and guidelines addressing the criteria for placement of children in specific foster homes are largely nonexistent.¹³³ Many agencies appear to simply follow commonly known practices or general laws and policies that are largely irrelevant to the actual placement of children in specific homes.¹³⁴

Public child welfare agencies do not use much of a placement process beyond the initial licensing of a foster home. This licensing procedure includes family interviews, police clearances, health records reviews, and home inspections.¹³⁵ Once this process is completed, the agency often assumes that licensed foster parents are fit and safe for virtually any child needing placement.¹³⁶ This assumption leads to a generic approach to placing children in specific homes, especially in most systems that face a shortage of foster homes, huge caseloads, and a lack of training for agency caseworkers and foster parents.¹³⁷

129. See Rosenthal et al., *supra* note 124, at 253.

130. See *id.* at 251; Emily Jean McFadden & Patricia Ryan, *Allegations of Maltreatment in Family Foster Homes*, in *ASSESSING CHILD MALTREATMENT REPORTS* 209–31 (Michael Robin ed. 1991).

131. See Rosenthal et al. *supra* note 124, at 253.

132. See Benedict et al., 1996, *supra* note 124, at 569; Benedict et al., 1994, *supra* note 124, at 584.

133. My research assistant and I made extensive attempts to find written guidelines or factors relating to the placement of a child in a particular foster home. We conducted extensive internet research and contacted several national experts in child welfare law and practice, including Donald Duquette, Director of the Child Advocacy Law Clinic at the University of Michigan Law School; Mark Hardin, Director for the ABA Center on Children and the Law; Edward Sites, Professor of Social Work at the University of Pittsburgh, in addition to Pennsylvania Child Welfare Services officials and individual caseworkers. All of these individuals agreed that there are no written guidelines for selecting a particular foster home for a child. Many stated that the main guideline they follow is the federal MultiEthnic Placement Act, which provides no criteria for deciding among foster homes, but only prohibits the use of race in making placement decisions. More specifically, a caseworker in Allegheny County, Pennsylvania stated that the only factors that agency workers take into account are the foster parents' requests. The foster parents put in a request for the age and number of children desired, and the caseworker uses that information in placement decisions. This caseworker also stated that the only guidelines in place are restrictive in nature, prohibiting for example placements of more than two children under five years old in one foster home unless the children are siblings.

134. See *supra* note 133. Both the Pennsylvania Child Welfare Services officials and caseworkers stated that no formal risk assessment of particular foster homes is conducted prior to placement.

135. See Benedict et al., 1994, *supra* note 124, at 583; THEODORE J. STEIN, *CHILD WELFARE AND THE LAW* 100 (rev. ed. 1998).

136. See Benedict et al., 1994, *supra* note 124, at 583.

137. See McFadden & Ryan, *supra* note 130, at 213.



A team of researchers that investigated agency practices in placing children in specific foster homes characterized the process as exhibiting institutional neglect.¹³⁸ Another group of researchers discussed the realities of the foster care system in an attempt to explain their findings that a significant portion of reports of abuse and neglect in foster care involves serious incidents:

Dynamics in family foster care demonstrate the interaction of multiple causal factors. Low pay leads to shortages in foster homes. These shortages create pressures to license marginal homes. Pressures to place children in the least restrictive setting direct difficult, behaviorally disturbed children into family foster care. Large caseloads mitigate against adequate supportive services by foster care workers. Inevitably, an overstrained family helps out in a crisis. [For example,] perhaps two abused children need emergency short-term placement. As no other placements are available, the short-term placements [sic] extends on. These events combine with stress in the family home—perhaps the husband is laid off at work—to create a tension-filled setting. A foster child reacts to this tension with provoking behavior and is abused. The children are removed, placed in another home, and a similar cycle repeats. The county investigation assigns blame to the foster family.¹³⁹

This description identifies the frequent failure of agencies to carefully match children with foster parents and homes. The placement process is often haphazard, leaving a great deal of room for improvement.¹⁴⁰

Some public agencies have made efforts to improve the practices surrounding the placement of children in specific foster homes. The common approach is to list criteria to guide caseworkers.¹⁴¹ Michigan has developed a typical list:

Placement decisions for each child are based on an evaluation of the following criteria:

1. The goal of permanence for the child
2. The child's safety, physical and emotional needs
3. Placement with relatives (Extended family or kin)
4. Proximity to the child's family
5. Placement with siblings
6. The child's and the family[']s religious preference
7. The least restrictive setting which will meet the child's needs
8. The continuity of relationships with friends, teachers, etc.
9. The availability of placement resources for the purpose of timely placements¹⁴²

138. *See id.*; *see also* Rosenthal et al., *supra* note 124, at 251.

139. *See* Rosenthal et al., *supra* note 124, at 257–58.

140. *See id.*

141. *See, e.g.*, JUDITH RYCUS ET AL., SEPARATION AND PLACEMENT IN CHILD PROTECTIVE SERVICES: A TRAINING CURRICULUM 55–56 (1988).

142. *See* Children's Foster Care Placement Types and Placement Criteria, at http://www.michigan.gov/fia/0,1607,7-124-5452_7117_7658-14897--,00.html (last visited July 13, 2003).



In current practice, the last point on the list appears to be the driving force in making placement decisions—the availability of a bed for the child.¹⁴³

Even if caseworkers fully utilize the listed criteria, it is not clear that the system would achieve enhanced safety for foster children. For example, while the item calling for the evaluation of placement with relatives provides concrete guidance on a factor that has support from empirical research on child safety and well-being, the item directly addressing child safety provides no detailed guidance, simply listing this as an area to evaluate.

Agencies have developed more specific criteria for evaluating child safety and well-being in a home setting through the creation and implementation of risk assessment tools.¹⁴⁴ Risk assessment is the “systematic collection of information related to the future abuse or neglect of a child.”¹⁴⁵

Risk assessment instruments require agency caseworkers to complete score sheets concerning factors believed to be related to future abuse or neglect.¹⁴⁶ For example, if the current complaint involves abuse, a family may be assigned a score of 0 if there have been no prior complaints, or a score of 1 if there has been 1 prior complaint.¹⁴⁷ The factors can be subjective, requiring that caseworkers exercise a great deal of judgment. One researcher characterizes this as the “art” of risk assessment.¹⁴⁸ For example, factors include whether the caretaker is a domineering parent, or whether the caretaker is motivated to improve parenting skills.¹⁴⁹ If the caseworker scores a family’s risk as high, he or she will open a case file and the agency will become actively involved in the case.¹⁵⁰

The factors included in risk assessment tools grow out of several underlying theories including theories on “stress, crisis, and coping, and their relationship to child maltreatment.”¹⁵¹ Frequently, these factors have been developed without empirical research establishing their predictive validity. Several scholars have concluded that factors included in risk assessment instruments have no established predictive validity.¹⁵² Although recent research establishes that risk assessment

143. See McFadden & Ryan, *supra* note 130, at 217.

144. See Scottye J. Cash, *Risk Assessment in Child Welfare: The Art and Science*, 23 CHILD. & YOUTH SERVS. REV. 811 (2001). Beginning in the early 1980s, agencies developed instruments to assess risk and guide decisionmaking in child welfare practice.

145. *Id.* at 811.

146. See, e.g., STATE OF MICHIGAN FAMILY INDEPENDENCE AGENCY, CHILDRENS PROTECTIVE SERVICES MANUAL, CFP 713–11 (2002) [hereinafter FAMILY RISK ASSESSMENT].

147. See *id.*

148. See Cash, *supra* note 144, at 816–17.

149. See FAMILY RISK ASSESSMENT, *supra* note 146.

150. See *id.*

151. Cash, *supra* note 144, at 812.

152. See *id.* at 821; DIANA J. ENGLISH ET AL., IMPROVING THE ACCURACY AND CULTURAL SENSITIVITY OF RISK ASSESSMENT IN CHILD ABUSE AND NEGLECT CASES (1993); Peter Lyons et al., *Risk Assessment for Child Protective Services: A Review of the Empirical Literature on Instrument Performance*, 20 SOC. WORK RES. 143 (1996); Thomas McDonald & Jill Marks, *A Review of Risk*



instruments have a high degree of interrater reliability,¹⁵³ the research does not establish that the factors predict future child maltreatment with any significant degree of validity. The factors utilized, and the instruments that incorporate them, could be largely irrelevant in determining the risk faced by a child with specific parents in a specific home.¹⁵⁴

Moreover, even if the factors accurately predict future maltreatment, agencies use risk assessment instruments when investigating a child's original family situation, but not to assess the risk presented by a specific foster home at the time of placement.¹⁵⁵ The matching of children with specific foster homes is left to largely unwritten, ambiguous criteria, and is often applied in an emergency or rushed situation.¹⁵⁶

There is a great deal of room for improvement in the policies and practices surrounding the placement of children in specific foster homes. The stakes are high because the incidence of child maltreatment in foster care is significantly higher than that experienced by children in the general population.¹⁵⁷ The safe haven of foster care does not appear to be very safe. Public agencies have failed to develop research-based criteria that caseworkers can effectively utilize to place children in safe foster homes. The placement decision is often made in a time of crisis with the most pressing factor being an open space or bed for the child.¹⁵⁸ Finally, even the most sophisticated instruments developed by agencies to assess risk are largely unsupported by rigorous empirical research because they have not been constructed from scientific findings related to child maltreatment.¹⁵⁹

III. THE TWO STUDIES: IMPLICATIONS FOR FOSTER CARE PLACEMENTS

The two studies described in Part I have potential implications for the development of foster placement assessment factors based on scientific evidence. The study of the importance of child-father facial resemblance may assist agencies in securing the safety of foster children through initial placement decisions and the subsequent monitoring of placements. Child safety is affected by the level of

Factors Assessed in Child Protective Services, 65 SOC. SERV. REV. 112 (1991); Peter J. Pecora, *Investigating Allegations of Child Maltreatment: The Strengths and Limitations of Current Risk Assessment Systems*, in ASSESSING CHILD MALTREATMENT REPORTS, *supra* note 130, at 73.

153. See Diana J. English & J. Christopher Graham, *An Examination of Relationships Between Children's Protective Services Social Worker Assessment of Risk and Independent LONGSCAN Measures of Risk Constructs*, 22 CHILD. & YOUTH SERVS. REV. 897, 899-900 (2000); Cash, *supra* note 144, at 820. Different case workers who are evaluating the same subject, using the same risk assessment system, will assign fairly consistent scores. However, the interrater reliability decreases as the items included in the risk assessment system require more subjective judgments.

154. Cash, *supra* note 144, at 821.

155. See, e.g., *Disposition and Structured Decision Making*, at http://www.michigan.gov/fia/0,1607,7-124-5452_7119_7194-15399--,00.html (last visited July 13, 2003).

156. See McFadden & Ryan, *supra* note 130, at 213.

157. See *supra* note 124.

158. See McFadden & Ryan, *supra* note 130, at 213.

159. See Cash, *supra* note 144, at 816, 818.



investment made by adult caretakers.¹⁶⁰ Thus, considering tangible measures that signal the level of expected caretaker investment could help placement agencies secure child safety.

The resemblance study appears to provide just such a tangible measure. The degree to which an adult male perceives that a specific child resembles him indicates the level at which he will invest in taking care of the child. The research indicates that if a man perceives a child as resembling him, he will care for the child and will be more willing to spend his resources on the child.¹⁶¹ One can reasonably infer that he will behave in a way that secures the child's safety.¹⁶² In contrast, if a man perceives a child as not resembling him, he will be less likely to invest in the care of the child and may present a threat to the child's safety.

If the resemblance measure is useful in theory, the question becomes how can agencies use it in practice. Initially, agencies could train caseworkers to assess a child's facial resemblance to any adult male in a proposed foster home.¹⁶³ The agency could then conduct further research on this type of resemblance assessment with the hope of developing more refined assessments. Agencies could develop a team of foster care placement specialists who, as one part of their placement procedures, would be able to assess resemblance with a high degree of accuracy and relevance to child safety. Of course, no matter how well trained agency caseworkers are in assessing facial resemblance, the assessment will necessarily entail a high degree of judgment and subjectivity. As a result, agencies may want to develop more sophisticated and objective tools to measure facial resemblance. They may be able to develop computer programs that would efficiently and accurately assess facial resemblance based on photographs of the child and the proposed foster father.¹⁶⁴ In summary, agencies could develop

160. See Daly & Wilson, 1996, *supra* note 7.

161. See Platek et al., *supra* note 1, at 162–64.

162. See *id.* at 163. Several of the specific questions and responses from the study provide the basis for an inference of enhanced child safety if the child resembles the adult male custodian: “Which one of these children would you be most likely to adopt?” (ninety percent selected the child that was their self-morph); “Which of these children do you find most attractive?” (eighty-five percent of the males responded by choosing their self-morph); “If one of those children damaged something valuable of yours, which one would you punish MOST?” (none of male respondents selected the child that was their self-morph).

163. See *id.* at 165. It should be noted that the study's authors suggest practical applications of their findings, stating in their conclusion,

[n]ot only are these results consistent with expectations based on paternal resemblance theory, but they may have important implications for adoption policy. Our data suggest that by matching characteristics of an adopted child to those of an adoptive father, the likelihood of achieving a long-term positive outcome might be enhanced.

Id. In addition, based on my discussion with Professor Edward Sites of the University of Pittsburgh School of Social Work in May 2003, public child welfare caseworkers have been making informal resemblance assessments for decades. It is a standard practice based on common-sense knowledge rather than scientific evidence.

164. See Sean O'Connor, *Biometrics and Identification After 9/11*, 7 BENDER'S IMMIGR. BULL. 159, 160–61 (2002). This technology would have to assess resemblance in a way that closely matches the way men assess physical resemblance.



methods for assessing facial resemblance that may be useful in placing children in specific foster homes that will be safer for them.

Even if agencies can develop tools to effectively assess facial resemblance, use of such tools as part of the initial placement decision-making process will be difficult. The decision to place a child in a specific foster home is often made in a pressure-filled, time-constrained atmosphere.¹⁶⁵ In addition, caseworkers often do not have many options for placement. A shortage of foster homes frequently results in a desperate hunt for the first available space.¹⁶⁶ These conditions do not allow for a careful matching of child and foster home that would include an assessment of the facial resemblance between child and foster father.

However, these conditions would not render facial resemblance tools useless in the foster placement process. Once the initial placement has been completed, the placing agency could use the subsequent assessment of facial resemblance to determine the appropriate level of agency support for, and monitoring of, the foster home.¹⁶⁷ If the foster father's facial features resemble those of the foster child to a high degree, a resource-stretched agency may be justified in playing the odds by focusing their support and monitoring efforts on other foster homes. If the degree of resemblance is low, an agency may be wise to provide highly active support and to monitor the placement closely through frequent visits and court reviews. Such targeting of scarce public agency resources could lead to significant improvements in foster care practice and safety.¹⁶⁸

The courts could also use evidence concerning facial resemblance in reviewing foster care placements.¹⁶⁹ A judge in a child dependency case could conceivably use this evidence in deciding to approve or continue a specific foster placement. More likely, a judge could use this evidence in fashioning appropriate support and monitoring services, for example, requiring in-home services to relieve foster family stress¹⁷⁰ and weekly caseworker visits to the specific foster home.¹⁷¹ The judge could also use the information to set the frequency and length

165. See McFadden & Ryan, *supra* note 130, at 213.

166. See *id.*

167. See LELA COSTIN ET AL., CHILD WELFARE: POLICIES AND PRACTICE 393–94 (4th ed. 1991). The facial resemblance study, combined with the data concerning the high rate of abuse by foster fathers, may justify a practice of placing a child with a single foster mother or lesbian couple rather than with a foster couple that includes a man who does not physically resemble the child.

168. For explanations of the need for this type of targeting of public child welfare resources, see Richard P. Barth, *Fiscal Issues and Stability in Special-Needs Adoptions*, 51 PUB. WELFARE 21 (1993); Mark E. Courtney, *The Costs of Child Protection in the Context of Welfare Reform*, 8 THE FUTURE OF CHILD 88, 89, 101 (1998).

169. See STEIN, *supra* note 135, at 64 (“The review requirement forces states to determine the continuing necessity for and appropriateness of the placement.”) (quoting Adoption Assistance and Child Welfare Act of 1980 § 675(5)(B), Pub. L. No. 96-272, 94 Stat. 500 (codified in scattered sections of 42 U.S.C.)).

170. See, e.g., 42 PA. CONS. STAT. § 6351(a)(1) (2002); see also Naomi R. Cahn, *Children's Interests in a Familial Context: Poverty, Foster Care, and Adoption*, 60 OHIO ST. L.J. 1189, 1221 (1999).

171. See, e.g., 42 PA. CONS. STAT. § 6351(a)(1) (2002).



of court reviews of the particular placement.¹⁷² Through the use of resemblance indicators, judges could assess and address the risk of maltreatment faced by a child in a specific foster home.

In addition, policymakers could use facial resemblance measures to interpret, apply, and even critique child welfare laws and policies. The practice of matching the race of the child and the foster family provides an example of this potential use.¹⁷³ Prior to the enactment of the Howard M. Metzenbaum Multiethnic Placement Act (MEPA),¹⁷⁴ public agency caseworkers regularly took race into account in placing children in specific foster homes.¹⁷⁵ At times, this became the driving factor in securing placements for the large portion of foster care children who are African American.¹⁷⁶ In the pursuit of securing foster parents who could raise children with an appreciation of their race and culture, placement agencies frequently disrupted stable and well-functioning interracial placements to place foster children with parents of the same race.¹⁷⁷

Recognizing that this practice undermined stability and permanency for affected children, Congress enacted MEPA.¹⁷⁸ The statute prohibits public child welfare agencies from taking race into account in making placement decisions.¹⁷⁹ Agency caseworkers can no longer legally engage in race-matching. Congress clearly valued stability and permanency over the possible cultural and racial benefits provided by matching children with foster parents of the same race.¹⁸⁰

Although some agencies and caseworkers defy MEPA and continue to take race into account in making placements, official policy and spreading practice ignore race as a placement factor.¹⁸¹ As a result, the priority becomes a speedy placement into the first home with space,¹⁸² and there is an often insurmountable reluctance to change this initial placement. Whether one agrees or disagrees with racial matching practices, MEPA might reinforce some of the worst and most risky placement practices.

The facial resemblance study provides concrete findings that may call MEPA into question. Although it was not part of the study, one could plausibly hypothesize that facial coloring, or race, is an important factor in men's

172. See, e.g., *id.*

173. Suzanne Brannen Campbell, *Taking Race Out of the Equation: Transracial Adoption in 2000*, 53 SMU L. REV. 1599, 1605, 1611–12 (2000). The practice of placing children with kin provides another example of the potential use of facial resemblance measures to interpret, apply, and critique child welfare laws and policies. Because kin may exhibit a higher degree of facial resemblance, attempting to place children in homes that include men who are biologically related to them may be justified.

174. Pub. L. No. 103-382, 108 Stat. 4056 (1994) [hereinafter MEPA] (codified as amended at 42 U.S.C. § 1996b and 42 U.S.C. § 5115a (1994) (repealed 1996)).

175. See Campbell, *supra* note 173.

176. *Id.*

177. *Id.*

178. *Id.* at 1613.

179. *Id.* at 1616–17; MEPA, *supra* note 174.

180. Campbell, *supra* note 173, at 1613.

181. *Id.* at 1617.

182. See McFadden & Ryan, *supra* note 130, at 213; Rosenthal et al., *supra* note 124.



assessment of their resemblance to specific children.¹⁸³ Of course, researchers should conduct studies to test and verify this hypothesis. But if it is verified, this finding would justify some form of racial matching. This justification for racial matching, because of its scientific base for enhancing child safety, would likely be more convincing than a justification based on a felt need for securing a child's racial and cultural identity.¹⁸⁴

In using race as a factor in making placement decisions, it would be highly desirable to have a large number of racially diverse foster homes that reflect the racial makeup of children requiring foster care placements.¹⁸⁵ This would allow agency caseworkers to make careful initial placement decisions based on detailed facial resemblance measures and would lessen the number of subsequent placement disruptions. Even if this optimal condition does not exist, the simple consideration of race would be justified to secure a higher degree of investment by the foster father. Laws, such as MEPA, that completely prohibit considerations of race appear misguided, and Congress may be wise to consider adjustments in this area.¹⁸⁶

The second study may also assist child welfare agencies in developing foster care placement policies and practices.¹⁸⁷ The study reveals the importance of parental investment in child safety and well-being. It indicates that a child's biological parents tend to invest more in securing the child's well-being. Even more specifically, the study indicates that children will do much better in homes that include their biological mothers. The study also reveals that children receive less parental investment and experience worse outcomes if they are raised by

183. Race is a factor in recognition and memory of faces. See John F. Cross et al., *Sex, Race, Age, and Beauty as Factors in Recognition of Faces*, 10 PERCEPTION & PSYCHOPHYSICS 393, 393–95 (1971); Roy S. Malpass & Jerome Kravitz, *Recognition for Faces of Own and Other Race*, 13 J. PERSONALITY & SOC. PSYCHOL. 330, 330, 333 (1969); John W. Shepard et al., *A Cross-Cultural Study of Recognition Memory for Faces*, 9 INT'L J. PSYCHOL. 205, 210 (1974). There are no studies that establish race as a factor in men's assessment of facial resemblance because researchers design facial resemblance studies in ways that eliminate race as a variable, thus indicating their belief that race is a factor relevant to the assessment of facial resemblance. See, e.g., Nicholas Christenfeld & Emily Hill, *Whose Baby Are You?*, 378 NATURE 669 (1995); Randolph M. Neese et al., *Sex Differences in Ability to Recognize Family Resemblance*, 11 ETHOLOGY & SOCIOBIOLOGY 11, 14 (1990). Researchers should conduct studies concerning the relevance of race to the assessment of facial resemblance. This is advisable especially in light of an additional study indicating that men react favorably towards children's faces that contain 25% or more of their characteristics. See Stephen M. Platek et al., *How Much Paternal Resemblance Is Enough? Sex Differences in Hypothetical Investment Decisions But Not in the Detection of Resemblance*, 24 EVOLUTION & HUM. BEHAV. 81 (2003).

184. Campbell, *supra* note 173, at 1611–12.

185. *Id.* at 1611–13, 1624.

186. Nothing in this article should be taken to argue that the new knowledge provided by the facial resemblance study allows for the construction of comprehensive decisionmaking rules. Facial similarity is only one factor that should be included in assessing the safety of a particular foster home. Certainly other factors may indicate that placement of a child in a foster home that includes a facially dissimilar man is safe. Conversely, other factors may indicate that placement of a child in a foster home that includes a facially similar man is unsafe.

187. See Case et al., *supra* note 1.



nonbiological mothers who also have biological children in their care. In this latter circumstance, the mothers invest more in their biological children to the detriment of nonbiological children living in their households.¹⁸⁸

These findings support the efforts of child welfare agencies to avoid the removal of children from the custody of their biological parents. Many child welfare agencies have articulated a preventive approach to protecting children and preserving families.¹⁸⁹ Although many agencies have failed to provide the resources necessary to support their rhetoric of family preservation, some agencies have been successful in implementing this approach.¹⁹⁰ By providing families with the services they need to remain intact and to avoid occurrences of child maltreatment, agencies have secured homes for children with their biological parents.¹⁹¹ The study indicates that this is a wise approach because, on average, it will secure a higher level of parental investment and result in better outcomes for affected children.¹⁹²

There will always be cases of child maltreatment despite the provision of services—cases that diverge too far from a condition of reasonably adequate care. In these cases, removal from the custody of abusive or neglectful biological parents is better for the child.¹⁹³ If necessary, however, agency caseworkers should carefully assess how, and to what extent, to involve the biological parents. This is especially true for biological mothers. Studies on parental investment indicate that, in many cases, involvement of a biological mother helps ensure child well-being.¹⁹⁴ The biological mother, if she can be safely involved in the child's life, may exert pressure that results in heightened investment by foster parents and child welfare agency caseworkers.¹⁹⁵

Accordingly, good practice would likely promote frequent and extended visitation between foster children and their biological mothers when it can be safely accomplished. This allows biological mothers to actively monitor their children and advocate for appropriate care and services.¹⁹⁶ Although they are

188. Part I.B. of this article gives a detailed description of the Case et al. study.

189. See STEIN, *supra* note 135, at 59–61; see, e.g., PA JUVENILE ACT, 42 PA. CONS. STAT. § 6301(b)(1) and (3) (2002); 55 PA. CODE § 3130.61(b)(3) (1999).

190. See Cahn, *supra* note 170, at 1212–18; JANNAH HURN MATHER & PATRICIA B. LAGER, CHILD WELFARE: A UNIFYING MODEL OF PRACTICE 132–37 (2000).

191. See MATHER & LAGER, *supra* note 190; Cahn, *supra* note 170, at 1212–18.

192. See Case et al., *supra* note 1, at 278.

193. Even the most adamant proponents of family preservation support this view. See Cahn, *supra* note 170, at 1222; ROBERTS, *supra* note 125, at 255.

194. See Biblarz & Raftery, *supra* note 46, at 325–26, 354–57; Case et al., 1999, *supra* note 117, at 234–35, 237; Case et al., 2000, *supra* note 117, at 285–97. Studies since the 1970s indicate that involvement of biological parents in the lives of children placed in foster care results in increased success for reunification efforts and other beneficial outcomes. See DAVID FANSHIEL & EUGENE B. SHINN, CHILDREN IN FOSTER CARE: A LONGITUDINAL INVESTIGATION 93–111 (1978); Edmund V. Mech, *Parental Visiting and Foster Placement*, 64 CHILD WELFARE 67, 70 (1985); Jerry L. Milner, *An Ecological Perspective on Duration of Foster Care*, 66 CHILD WELFARE 113, 117–18, 122 (1987).

195. See generally Case & Paxson, *supra* note 87; Milner, *supra* note 194, at 116–22.

196. See Case & Paxson, *supra* note 87.



unable to invest in their children by providing them with a home and constant care, biological mothers can invest by making sure others act appropriately and meet their obligations to the children. This insight would likely lead agencies to provide biological parents with much more contact than the widely utilized standard practice of one visit every other week.¹⁹⁷

In addition to providing biological parents, especially mothers, with a great deal of contact with their children, agency caseworkers must actively listen to biological parents. If these parents are to have an avenue for investing in their children while in foster care, the caseworker must be willing to hear biological parents' concerns and act upon them. Caseworkers cannot, as they often do in current practice, ignore the biological parents.¹⁹⁸ For example, if a biological mother visits with her children twice a week and observes the children to be constantly dirty and hungry, she needs to be able to express concern to a caseworker who will hear this information and actively address the situation.

For children who must be placed in foster care, the study also may support an agency preference for foster homes that do not include biological children of the foster mother. The study indicates that a foster mother will invest more in her biological children to the detriment of the biologically unrelated foster children.¹⁹⁹ Although a foster mother without biological children in her home may not invest as much in her foster children as a typical biological mother would invest in her children, this foster mother would not be faced with a constant tradeoff between biological children and nonbiological children—a situation in which non-biological foster children will likely lose and suffer.²⁰⁰

The realities of the foster care system, with its shortage of available homes and spaces, make it impossible to limit placements to foster parents who do not have custody of their own biological children.²⁰¹ Child welfare agencies should, however, recognize the risk of lower parental investment that exists when an unrelated foster child is placed with foster parents who have biological children in their home. Recognizing the risk may translate into closer monitoring of these placements. It may also drive agencies to develop and provide enhanced support services targeted to foster parents who have biological children in their homes and to foster children within such homes.

197. See, e.g., 55 PA. CODE § 3130.68(a) and (b) (2002). Based on my observations in representing children and parents, standard practice is one-hour visits in the agency office.

198. In working within public child welfare systems throughout the past fifteen years, I have witnessed directly the treatment of biological parents as "discardable." See David Fanshel, *Decision-Making Under Uncertainty: Foster Care for Abused or Neglected Children?*, 71 AM. J. PUB. HEALTH 685 (1981).

199. See Case et al., *supra* note 1, at 275, 278.

200. Again, this article does not propose a comprehensive decision rule. The new knowledge about biological relationships and relative parental investment only provides one factor to consider when placing a child in a foster home. Information beyond biological relationships may lead to the placement of children with high investing foster parents who live with their biological children. Such additional information could also result in not placing children with low investing foster parents, even though they have no biological children.

201. See McFadden & Ryan, *supra* note 130, at 213; STEIN, *supra* note 135, at 100.



Relatedly, the study may reinforce the growing practice of placing foster children with relatives when possible. Based on evolutionary theory that is consistent with the findings of the study, one would expect kin to invest more in related foster children.²⁰² While in genetic terms a grandparent or aunt is not as closely related to the child as a parent, there is a significant degree of relatedness.²⁰³ This degree of relatedness would, on average, result in biologically related foster parents investing more in a specific foster child's well-being than unrelated foster parents.²⁰⁴ Thus, the study supports the agency practice of securing kin placements.

In making decisions in child dependency cases, judges can use the study's findings in similar ways as the public child welfare agency. They can require the agency to present substantial evidence in order to justify the removal of children from the custody of their biological parents, especially their biological mothers.²⁰⁵ This will help avoid unnecessary removals that may diminish the overall parental investment children receive. If removal is necessary, judges can enter orders that allow biological parents liberal access to their children.²⁰⁶ Judges can also actively listen to the views of biological parents at court hearings.²⁰⁷ In addition, if a judge becomes involved in selecting a specific foster home for a child, she can require that the agency attempt to find a home with a foster mother who does not have her own biological children in the home. If this attempt is unsuccessful, she can order the agency to closely monitor the placement and actively provide support services that increase parental investment in the foster child.²⁰⁸ Finally, judges can require the agency to actively recruit and utilize kinship foster homes whenever possible.²⁰⁹

Legislators and policymakers may also find the study useful. For example, the study provides support for an increased emphasis on preventive approaches that preserve biological families. Legislation providing targeted funds for family preservation services that assist families and prevent parent-child separations may make sense in terms of securing adequate parental investment in children.²¹⁰ Services targeted at preventing maltreatment and maintaining stable family environments allow more biological parents to maintain custody of their children, helping them through a difficult period of poverty or stress so they can invest fully

202. See ROBERT TRIVERS, *SOCIAL EVOLUTION* 41–47, 109–44 (1985).

203. See *id.*

204. See *id.*

205. See, e.g., 42 PA. CONS. STAT. § 6351(a) and (b) (2002).

206. See, e.g., *id.* § 6351(a)(2) (2002).

207. See, e.g., *id.* § 6351(e) and (f) (2002) (requiring a court hearing at least every six months in certain situations).

208. See, e.g., *id.* § 6351(a) and (f) (2002); see also *In re Tameka M.*, 534 A.2d 782, 787–90 (Pa. Super. Ct. 1987), *aff'd*, 580 A.2d 750 (Pa. 1990).

209. See, e.g., 42 PA. CONS. STAT. § 6351(a) and (f) (2002); see also *Tameka M.*, 534 A.2d at 787–90; Cahn, *supra* note 170, at 1219.

210. See Family Preservation and Support Act, 42 U.S.C. § 629a (2002); see also ROBERTS, *supra* note 125, at 142–49.



in their children.²¹¹ In light of the study's findings, legislators may also be wise to consider more specifically targeting scarce resources at securing the presence of biological mothers in their children's lives.

In addition to providing support for legal measures seeking family preservation, the study may provide support for mandating frequent visitation between biological parents and their children. The study indicates that the active involvement of a child's biological mother in his or her life may contribute to securing an appropriate level of parental investment from nonbiological parents.²¹² Even if the biological mother cannot directly provide adequate care for the child, she can monitor the child's placement and make sure the child receives adequate food and appropriate services, such as health care and special education. Thus, the study may prompt legislators and policymakers to require public child welfare agencies to actively support frequent visitation, certainly more than the common requirement of one hour every two weeks.²¹³

In summary, both studies add knowledge that is relevant to the policies and practices surrounding the placement of children in foster care. This article examines foster care placements because that area clearly involves placement of children with nonbiological parents and raises concerns of child safety and parental investment.²¹⁴ This area allows for a careful and balanced application of the studies' findings and an illustration of an incremental approach to applying new knowledge in a specific context.

Only the first step in policy and practice development has been taken here—a rather conjectural formulation of hypotheses based on new knowledge. This new knowledge does not lead to comprehensive conclusions or decision-making rules. It merely identifies potentially relevant considerations, with the hope that these considerations will be addressed in the field through experimentation, data gathering, and further development of the knowledge. At some point, this process may yield comprehensive guidance in the placement of children in foster care.



This article brings the findings of two studies to bear on the policies and practices surrounding the placement of children in foster care; it does not claim that these studies provide any type of comprehensive approach in this area. Their findings can be used to incrementally construct, test, and improve policies and practices in a specific area of activity.

It is most important to realize that this is simply the beginning of a process that should involve further testing of the studies' findings. The doubts surrounding

211. See Cahn, *supra* note 170, at 1212–23.

212. See Case et al., *supra* note 1.

213. See, e.g., 55 PA. CODE § 3130.68.

214. The studies may also be relevant in other areas such as the assessment of risk presented by biological parents, the placement of children with adoptive parents, and the awarding of custody at the time of divorce.



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the importance of facial resemblance and of biological relationships need to be addressed and refined through additional scientific research.

This process should also involve the careful use of the studies' findings to formulate incremental changes in relevant policies and practices. Once formulated, changes should be implemented and the results should be rigorously measured and monitored, with appropriate adjustments being made. Implementation should not be comprehensive, allowing for comparisons. For example, one jurisdiction may develop a sophisticated computer system to analyze facial resemblance between proposed foster fathers and children in each case, placing children only with foster fathers who have a certain degree of facial resemblance. Another jurisdiction may simply have caseworkers assess the degree of facial resemblance at placement to determine the degree of monitoring and support services to be provided. If each jurisdiction then achieves similar results in terms of reducing abuse in foster care, other jurisdictions can choose between two effective approaches. If the results differ, other jurisdictions can react appropriately to these findings.

In addition, the process should include the constant raising of new questions and lines of inquiry. This will spur further research and will engage legal professionals and policymakers in a discussion with scientific researchers. This is the most exciting implication of this article—the encouragement of a dialogue among legal scholars and scientific researchers. This dialogue should result in the identification of relevant issues and lead to an interdisciplinary approach to addressing these issues. Together, legal and scientific scholars can carefully and incrementally build knowledge and improve policies and practices. The hope of this article is to further such scholarly partnerships and endeavors.

