### An Evolutionary Perspective on Why Some Men Refuse or Reduce Their Child Support Payments

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This review article begins by highlighting the sociological, macrolevel focus of previous work on the determinants of child support payments. We then highlight the value of addressing these issues from a psychological perspective. We argue that research and policy will benefit by embracing an explicitly evolutionary psychological perspective. We present several evolutionary hypotheses regarding the determinants of child support payments and discuss how previous research informs these hypotheses. Finally, we review proposed solutions for increasing men's compliance with child support orders. We conclude that an evolutionary perspective can inform research not only on the determinants of child support payments but also the social policies that might increase the reliability with which these payments are made.

Over the past several decades, profound changes have occurred in the United States and other industrialized nations in how the human family is structured. Many of these changes have drastically altered the contexts in which children are raised, including significant increases in nonmarital cohabitation, single parenthood, divorce, and remarriage (Bumpass, 1990; Sweet & Bumpass, 1987; Wilson, 2002). About 30% of all children in the United States today—at least 20 million children—do not live with their genetic father, and one in two children born in the United States today will live in a single-parent household at some time before adulthood (United States Bureau of the Census, 2001; and see Bumpass & Sweet, 1989; Norton & Miller, 1992; Wilson, 2002).

A sizable literature addresses the effects of these family structure changes on children's health and well-being. These studies regularly reveal that not living with both genetic parents negatively impacts children's lives (e.g., Daly & Wilson, 1985; 1998; McLanahan & Sandefur, 1994). Children living with just one genetic parent are more likely than children living with two genetic parents to receive less education, to have nonmarital births, and to live in poverty as adults. Previous work suggested that a key factor in producing the negative consequences of living with a single parent is lack of income

of the parent, nearly always the mother. Due to the low income potential of their mother and the receipt of little or no child support from their father, a majority of these children live in economic poverty (Garfinkel & McLanahan, 1986; Holden & Smock, 1991; Wilson, 2002).

In the United States in the 1990s, just half of resident parents who had been awarded child support orders received full payments—one fourth received partial payments and one fourth received no payments (United States Bureau of the Census, 1995). Child support payments can have a substantial impact on the health and well-being of children residing with single parents (e.g., Fox & Blanton, 1995; Geary, 2000; Seltzer, Schaeffer, & Charng, 1989). To improve the economic lot of children living with single parents, the United States and other industrialized countries have instituted coordinated efforts to make more effective and efficient the payment of adequate child support by the noncustodial parent to the custodial parent (for reviews, see Baker, 2000; Garfinkel, McLanahan, & Robins, 1986; Garfinkel, Meyer, & McLanahan, 1998; Wilson, 2002). These national efforts have promoted, inspired, and funded research designed to identify the predictors of child support payment—including the identification of which men refuse to pay child support

Most of the research designed to identify the determinants of child support payments or the failure to make child support payments has had a sociological focus, seeking explanations from macrolevel predictor variables, such as state-level payment enforcement policies (for reviews, see Fox & Blanton, 1995; Garfinkel, Meyer, & McLanahan, 1998). A handful of researchers have recognized the need to identify the determinants of child support payments within the psychology of individual men, focusing on the predictive value of more individual and relationship-level variables, such as personality, parenting attitudes, and interpersonal relationship dynamics. For example, one of the most important psychological predictors of support payment compliance is the perceived quality of the former spouse relationship (see, e.g., Meyer & Bartfeld, 1998).

In this article, we first briefly review what is known about child support payments-which men pay or do not pay and why or why not. This review highlights the macrolevel focus of previous sociological work on the determinants of child support payment. In the next section, we highlight the value of addressing these issues from a psychological perspective, focusing on psychological processes that occur at the individual level. We then argue that research and policy will benefit by embracing an explicitly evolutionary psychological perspective (Buss, 2004a; Tooby & Cosmides, 1992), in which the modern dilemmas of child support payment and receipt are investigated with an appreciation for the recurrent adaptive problems confronted by ancestral mothers, fathers, and children. We outline several evolutionary psychological hypotheses regarding the determinants of child support payment and, where applicable, discuss how previous research informs these hypotheses. Finally, we review several proposed solutions for increasing men's compliance with child support orders and evaluate the likely success of these proposals. We conclude that an evolutionary psychological perspective can inform research into not only the determinants of child support payments but also the social policies that might increase the reliability with which these payments are made.

### WHAT DO WE KNOW ABOUT CHILD SUPPORT PAYMENTS?

Over the past two decades, sociologists and policy analysts have made great progress in identifying macrolevel predictors of child support payment, as well as a few microlevel or relationship-level predictors of child support payment. In this section, we highlight what is known empirically about who pays child support, who does not, and why some men pay child support whereas others do not. Throughout the remainder of this article, we assume that mothers are the custodial parents and fathers are the noncustodial parents responsible for child support payments. Although there are custodial fathers and noncustodial mothers responsible for child support payments, these family situations are relatively rare (e.g., fathers in one national-level study comprise less than 20% of

custodial parents awarded child support; Smock & Manning, 1997; see also Garfinkel, Meyer, McLanahan, & Seltzer, 1998).

#### Marital Status of Former Partners

Previous research indicates that the marital status of the former partners is a key predictor of the reliability and amount of child support payments made by the noncustodial father to the custodial mother. Women previously married to the child's father are substantially more likely to receive a greater amount of child support from the child's father and to receive this support more reliably than are women who were not married to the father, in part because previously married women are more likely to request and to be awarded such support (see, e.g., Laakso, 2002; Meyer & Bartfeld, 1996; 1998; Seltzer, 1991). There are many potentially confounding variables that might account for the relationship between marital status and receipt of child support, including the fact that men who father children outside of marriage, compared to men who father children in marriage, tend to have less education and make less money (see reviews in Garfinkel, McLanahan, Meyer, & Seltzer, 1998; Johnson, Levine, & Doolittle, 1999; Wilson, 2002). In addition, men who father children outside of marriage may be less certain of their paternity and, as a consequence, may be less willing to pay support for children to whom they may not be genetically related (Baker, 2000; and see Apicella & Marlowe, 2004; Baker & Bellis, 1995; Geary, 2000; Platek, 2002; Platek et al., 2004). We address further the possible link between paternity uncertainty and nonpayment of support to children produced outside of marriage or other stable relationships in a following section of this article ("Investment by noncustodial fathers in children produced outside of a stable partnership").

#### Parental Income and Education

Using data at the local, state, and national levels, several studies have documented that men with higher incomes and more education are more likely to fulfill their child support obligations (e.g., Arditti, 1992; Arditti & Keith, 1993; Hill, 1992; Meyer & Bartfeld, 1996; Seltzer, Schaeffer, & Charng, 1989; Smock & Manning, 1997; Teachman, 1991). Thus, one unsurprising determinant of making child support payments is the ability to pay them. That men with more education are more compliant with child support orders probably reflects the positive association between education and income, although there also may be an independent effect of education. Perhaps men with more education appreciate the economic and social value to their children of their child support payments more than do men with less education. At least one study also documented that the mother's income positively predicts child support payments. Using data collected from 220 couples as part of the Panel Study of Income Dynamics,

Smock and Manning (1997) found that the incomes of both the nonresident parent (father) and resident parent (mother) are associated with greater child support payments. At least one study indicates that custodial mothers with more education are more likely to receive child support owed to them (Seltzer, 1991).

#### Father's Proximity to Children and Visitation Frequency

Another focal point of previous research indicates that men who live closer to and, perhaps as a consequence, more frequently visit their noncustodial children also are more likely to meet in full their child support obligations (e.g., Seltzer, 1991; Seltzer et al., 1989; but see Arditti, 1992; Arditti & Keith, 1993; for parallel research in nonhuman primates on the link between paternal investment and father-offspring proximity; see Buchan, Alberts, Silk, & Altmann, 2003). What previous research has not yet determined is the direction of causality. Is the likelihood of child support payment higher as a consequence of living closer to and more frequent visits with children? Or perhaps men who meet their child support obligations feel entitled to visit more frequently, to monitor the mother's spending of the child support monies. Or perhaps child support payment, living closer to children, and more frequent visitation with children are only spuriously associated, simultaneously caused by a third variable, such as certainty of paternity—that is, men's assessment that they are genetically related to the children (e.g., Apicella & Marlowe, 2004; Baker, 2000; Baker & Bellis, 1995; Platek et al., 2004; Wilson & Daly, 1992).

#### Quality of Former-Spouse Relationship

Using reports from a small sample of 59 divorced parents, Wright and Price (1986) documented that the quality of the relationship between the custodial and noncustodial parent (defined as coparental communication, honesty, and type of relationship preferred) predicts compliance with child support orders. Arditti (1992, see also Arditti & Keith, 1993) randomly sampled 125 divorced fathers from court records in a single Virginia county and found that men who do not report attempting to avoid their former spouse also report paying more child support. Using a nationally representative sample of ever-divorced mothers (N = 644) from the National Longitudinal Study of the High School Class of 1972, Teachman (1991) found that fathers who contribute economically to their noncustodial children also report better relationships with the custodial mother.

In each of these studies, the key variable, "quality of relationship with former spouse," is not well-defined, sometimes asking little more than a single question about how much the parents like each other, or how well they get along. Research is needed in which "quality of the former-spouse relation-

ship" is more clearly defined. Doing so might allow people in the helping professions to more productively work with parents to improve the relationship, with the goal of increasing compliance with child support orders. An intriguing possibility we address later in the article is whether the "quality" of the former-spouse relationship—and the associated child support payments—might be predicted by the noncustodial father's continued sexual access to the mother (see Weiss, 1975).

#### Remarriage and New Children

Several studies have investigated whether the remarriage and birth of subsequent children to one or both former spouses affects the reliability and amount of child support received by the custodial parent. Most of these studies have focused on the remarriage and birth of subsequent children to the noncustodial father. Studies focusing on the father's remarriage have produced mixed results, with some studies documenting that the father's remarriage is associated with lower or less reliable child support payments (e.g., Teachman, 1991), other studies documenting that his remarriage is associated with higher or more reliable child support payments (e.g., Seltzer, 1991), and still other studies finding no relationship between the father's remarriage and the reliability or amount of child support payments (e.g., Hill, 1992; Meyer & Bartfeld, 1996; Smock & Manning, 1997). Fewer studies have addressed how the mother's remarriage affects the reliability and amount of child support payments made by the noncustodial father. These studies also have produced mixed results (e.g., Hill, 1992; Mandell, 1995; Seltzer, 1991).

Apparently just a single study has tested specifically the hypothesis that the birth of new children to the noncustodial father affects his support payments to children from a previous relationship. Using data from two waves of the National Survey of Families and Households, Manning and Smock (2000) analyzed reports by 133 noncustodial fathers with children under 18 years at both waves living with mothers, and to whom the fathers made child support payments. Manning and Smock (2000) provided evidence that fathers "swap" or trade-off economic investment in children by a current and previous partner, but only when the trade-off is between new genetic children living in the father's household and existing genetic children living outside the father's household. Fathers invest more in genetic children than in stepchildren, regardless of whether those children are from a current or previous partner, and regardless of whether they reside with the children. These findings are consistent with a sizable literature indicating differential investment in stepchildren and genetic children (see, e.g., Anderson, Kaplan, & Lancaster, 1999; Anderson, Kaplan, Lam, & Lancaster, 1999; Burch & Gallup, 2001; Hofferth & Anderson, 2003; Wilson, Daly, & Weghorst, 1980; Daly & Wilson; 1988, 1995, 1996).

## Other Correlates of the Reliability and Amount of Child Support Paid by Noncustodial Fathers to Custodial Mothers

A handful of studies based on data collected at the local, state, and national levels have identified additional correlates of the reliability and amount of child support paid by noncustodial fathers to custodial mothers. Using a sample of 180 divorced, custodial mothers, Seltzer et al. (1989) found that the amount of time since the divorce is associated with decreases in child support payments. Using data from the National Survey of Families and Households, which includes 1,350 cases in which the respondents are mothers in households with children under 18 and in which the father was living in another household, Seltzer (1991) found that mothers with younger children are more likely to receive child support than are mothers with older children (but see Meyer & Bartfeld, 1996). This relationship might be confounded with other variables, however, including the time since divorce and the remarriage of one or both parents.

In summary, previous research conducted by sociologists and policy analysts has identified several predictors of the reliability and amount of child support paid by noncustodial fathers. These include the marital status of the former partners, parental income and education, the father's proximity to his children and the frequency with which he visits them, the quality of the former-spouse relationship, and the remarriage and subsequent reproduction of one or both parents. Most of this research has been empirically driven-focused on macrolevel sociological variables-rather than designed to test specific hypotheses derived from integrative, coherent theories about human nature and psychology. One consequence of this broad focus is that a large gap exists in our knowledge about the determinants of child support payments that can be redressed by a focus on psychological processes. In the next section of the article, we review what could be known about child support payments as a consequence of taking a psychological approach, in general, and an evolutionary psychological approach, in particular.

### WHAT COULD WE KNOW ABOUT CHILD SUPPORT PAYMENTS?

#### Insights From the Psychological Sciences

Sociologists, political scientists, and policy analysts have made great progress over the past several decades in identifying several predictors of the reliability and amount of child support payments made by noncustodial parents to custodial parents. Still, there is much more that could be discovered about child support payments by stepping outside the broad brushstrokes of the disciplines that focus on macrolevel descriptions and explanations. A focus on individual-level psychology and behavior may provide valuable insight into the problems, pitfalls, and challenges of child support.

Given similar educational backgrounds and similar incomes, for example, why might one man reliably provide child support whereas another does not? If two men have both remarried and had children by a new partner, how might we account for the fact that one man consistently provides support to the children by his first wife, whereas the other man does not (and assuming other key variables are controlled statistically, including, for example, the income and education of the men)? As a final example, why might a noncustodial father reliably pay the child support he owes for a few months, even a few years, and then rescind that support when his former wife remarries? These are questions that are difficult to address by the macrolevel frameworks offered by disciplines such as sociology. Instead, the answers to these questions require a focus on individual-level psychology and behavior of noncustodial parents and custodial parents. The previous research reviewed in the first section of this article relied primarily on large samples of parents for which little detailed information was available. Few studies have collected detailed information from parents and children that might help to explain the many exceptions to the macrolevel findings identified by previous work (see Haskins, 1988; Mandell, 1995).

What we know about child support payments, therefore, has been generated by researchers working with existing databases that often include little detailed information about hundreds or thousands of cases. If we as a society wish to improve the flow of investment by noncustodial parents to their children, perspectives from other disciplines may help add to the knowledge base of who pays child support, who does not pay child support, and why some noncustodial parents pay whereas others do not. The psychological sciences require a focused attention to the underlying information processing mechanisms that generate the behaviors that sociologists and policy analysts have identified as correlates of child support payment or nonpayment. If we wish to identify the determinants of child support payment or nonpayment, we must make an effort to understand the mechanisms that generate the observed behaviors and the environmental inputs that activate those mechanisms.

The psychological sciences and their focus on information processing mechanisms—including the input into those mechanisms, the decision rules that determine the functioning of those mechanisms, and the output generated by those mechanisms—are always implicitly evolutionary psychological, and sometimes explicitly evolutionary psychological. This is because the only known cause of complex design or adaptation is evolution by natural selection (Buss, Haselton, Shackelford, Bleske, & Wakefield, 1998; Darwin, 1859/2000; Dobzhansky, 1962; Symons, 1987; 1992; Tooby & Cosmides, 1992; Williams, 1966). In the next section, we briefly address child support from an explicitly evolutionary psychological perspective. Our intention is to open the door to explicitly evolutionary psychological discussions of child support—who pays, who does not pay, and why some men

pay and some men do not pay. Much of our discussion is speculative and theoretical, with little or no relevant empirical work yet conducted. Our intention in the following discussion is to suggest that an evolutionary psychological perspective might help add to the knowledge base of the determinants of child support payment and nonpayment.

#### Insights From Evolutionary Psychology

A modern evolutionary perspective suggests that if we seek to understand a behavior, a critical avenue of investigation is the underlying evolved psychology that generates the behavior (Buss, 2004a; Tooby & Cosmides, 1992). A careful consideration of the adaptive problems that ancestral humans were likely to have faced recurrently will help to identify the evolved psychological solutions to those adaptive problems. The modern case of a noncustodial father's formalized, state-regulated and enforced child support payments can be conceptualized as a specific case of a man's continued investment in children produced by a woman to whom he was previously partnered, but to whom he is no longer partnered. The adaptive problem of whether and how much to invest in children has been a key focus of the evolutionary sciences over the past several decades, beginning with Trivers' (1972) influential contribution (and see Dawkins & Carlisle, 1976; Maynard Smith, 1977; McNamara, Houston, Székely, & Webb, 2002; for recent empirical work, see, e.g., Apicella & Marlowe, 2004; Burch & Gallup, 2001; Platek et al., 2004; Platek, Burch, Panyavin, Wasserman, & Gallup, 2002; Platek et al., 2003).

In his theory of parental investment and sexual selection, Trivers (1972) noted two fundamental features of sexually reproducing species. First, the sex with greater minimum parental investment (i.e., investment necessary for an offspring to reach reproductive maturity) will be the more choosy sex, displaying more stringent partner preferences and greater discrimination about with whom to have sexual intercourse. The sex with lesser minimum parental investment, in contrast, will be the less choosy sex, displaying less stringent partner preferences, greater eagerness to have sexual intercourse, and lesser discrimination about with whom to have sexual intercourse. In humans, as in most sexually reproducing species, females are burdened with greater minimum parental investment than are males and, therefore, females are more choosy than are males about with whom to sexual intercourse (for a review of research on humans, see Buss, 2004b). Second, greater intrasexual competition for sexual access to the more choosy sex will characterize the lesser investing sex. Again as in most sexually reproducing species, human males display more intense intrasexual competition than do human females (for a review of research on humans, see Daly & Wilson, 1988).

A key consequence of these mating dynamics is that the sex with lesser minimum parental investment is more likely to abandon the other partner and any offspring produced by the pair. In humans, as in most sexually reproducing species, the sex more likely to abandon the other parent and offspring is the male. Single parenthood in humans is, therefore, likely to be defined most often by a female attempting to raise a child or children without the investment of an adult male. Human males are far more likely to abandon their children than are human females, and this is true both for marital and nonmarital relationships (for recent statistics, see Wilson, 2002).

Divorce was likely a recurrent feature of human evolutionary history. For example, in an ethnological study of 94 preindustrial cultures, Broude and Greene (1983) found that divorce occurs with some regularity in about 70% of cultures. Although about 16% of cultures strongly disapprove of divorce, in about 9% of cultures nearly every adult had gone through a divorce. Children produced in these dissolved relationships often reside with one parent and that parent's family, with variable investment by the noncustodial parent (Frayser, 1985; Hill & Hurtado, 1996). Whether they receive continued investment from their noncustodial father is a function of several key variables. In the following paragraphs, we discuss some of these potential predictors of continued investment by the noncustodial father in his children. We first address the continued investment of a man in children produced in a stable, marriage-like relationship. We then address the investment of a man in children produced in less formal, sometimes noncommitted relationships, including brief sexual affairs and short-term partner "poaches" (i.e., luring away for a romantic relationship a person already involved in a romantic relationship; Schmitt & Buss, 2001).

## Investment by Noncustodial Fathers in Children Produced in a Stable Relationship

One hypothesis for why noncustodial fathers might decrease or terminate investment in their children is that they may be suspicious as to whether the resources they invest are reaching their children. Resources intended for noncustodial children might instead by used by the custodial mother for a variety of reasons that do not include direct investment in the children. Fathers who are not meeting their court-ordered child support obligations frequently report a concern for how the custodial mother is spending the money, suspecting that it is not being used to raise the children (see, e.g., Haskins, 1988; Mandell, 1995).

From an evolutionary psychological perspective, these concerns of noncustodial fathers might be reframed as concerns that the custodial mother is using the resources provided by the noncustodial father for such activities as increasing her own attractiveness as a potential partner to other men or channeling resources to a new partner, to children with a new partner, or to the children of a new partner produced in a previous relationship of that new partner (see Table 1). In each case, these activities would likely reduce the level of investment that the custodial mother makes in the

#### TABLE 1

#### Hypotheses Derived From an Evolutionary Perspective on Why Some Men Refuse or Reduce Their Child Support Payments

- 1. Men will refuse or reduce child support when they are concerned that custodial mothers will use the resources for increasing their own attractiveness as a potential partner to other men.
- 2. Men will refuse or reduce child support when they are concerned that custodial mothers will channel the resources to a new partner and their new children
- 3. Men will refuse or reduce child support when they need resources to obtain a new partner.
- 4. Men will refuse or reduce child support when they need resources to retain a new partner (especially if the new partner is particularly attractive as a prospective partner to other men).
- 5. Men will refuse or reduce child support when new children are produced with a new partner.
- 6. Men will refuse or reduce child support when their confidence in paternity is low (including when father-child resemblance is low).
- 7. Men will refuse or reduce child support when sexual access is terminated with the custodial mother.
- 8. Men who engage in adultery or short-term partner poaching will especially refuse or reduce child support when their confidence in paternity is low (including when father-child resemblance is low).

children of the original relationship. There is at least one study suggesting that a mother's remarriage is followed by a reduction or less reliable payment of child support by the noncustodial father (Hall, 1992). What we do not know from this macrolevel research is *why* these men reduced or terminated child support payments when the custodial mother remarried. Future work can profitably investigate the evolved psychology that generates decreased investment by the noncustodial father on the custodial mother's remarriage or active reentry into the mating marketplace.

When his relationship with the custodial mother ends, a man is faced with the adaptive problem of attracting a new partner, and this often requires resources (see Buss, 2004b). Again, remarriage is quite common among preindustrial cultures (Broude & Greene, 1983; Frayser, 1985), suggesting that humans may have evolved to respond psychologically to this mating contingency. We hypothesize, therefore, that men may feel that investment that once was channeled to children of a previous partner should now be used to attract a new partner, with the result that child support payments are lower or less reliably made.

Once a new partner is attracted, the noncustodial father now is faced with the adaptive problem of retaining the exclusive attention and affection of that new partner. This also requires investment and resources (see, e.g., Buss, 1988; Flinn, 1988), especially if the new partner is young and is particularly attractive as a potential partner to other men (Buss & Shackelford, 1997). We hypothesize, therefore, that investment once channeled to children of a previous partner may now be used to retain the exclusive attention and affection of a new partner, with the result that child support payments are lower or made less reliably by the noncustodial father. We further hypothesize that, if the remarriage is to a much younger woman, partner retention efforts and concomitant resource expenditures may be especially intense (Buss & Shackelford, 1997), such that the level and reliability with which child support payments are made is lower still. No previous work has tested directly these hypotheses. A few studies have investigated whether a father's remarriage is accompanied by a decrease in the reliability or amount of child support payments. These studies have produced mixed results that are difficult to interpret with respect to the partner retention hypothesis, because it is not clear whether and to what extent "father's remarriage" assesses efforts to retain a newly acquired partner (Hill, 1992; Meyer & Bartfeld, 1996; Seltzer, 1991; Teachman, 1991).

If a noncustodial father remarries, he may produce children with his new partner, and these new children will require his investment. Investing in these new children is particularly important from an evolutionary perspective because human children are especially vulnerable during their first few years of life (Fisher, 1992). In addition, according to parent-offspring conflict theory (Trivers, 1974), parents are expected to terminate investment in a particular child when the costs (in terms of the parents' future reproduction) outweigh the benefits (in terms of the survival of the current child to reproductive maturity). This model was first proposed to explain the conflict between mothers and children over weaning (i.e., in humans, children often desire to continue breastfeeding beyond the mother's desire to do so), but it may have implications for men and child support payments (see also Alexander, 1974). We hypothesize that this need to invest in new children may result in decreased investment in noncustodial children who are older and in less need of investment (or would have been in our ancestral environment; Fisher, 1992). Most previous macrolevel research on this question has used father's remarriage as a proxy for the production of new children, with the conflicting results noted previously. Manning and Smock (2000) recently provided the first direct test of the hypothesis that fathers "swap" investment in noncustodial children for investment in new, custodial children (Furstenberg, 1995; Furstenberg & Cherlin, 1991; Furstenberg, Nord, Peterson, & Zill, 1983; Furstenberg & Spanier, 1984). The results generated by Manning and Smock (2000) indicated that fathers do trade off investment in noncustodial children for investment in new, custodial children, but only when the trade off is between new genetic children living in the father's household and existing genetic children living outside the father's household. This pattern of findings is consistent with the work of Daly, Wilson, and others that documented an evolved psychology of differential parental investment such that investment in genetic children is greater and more reliable than is investment in stepchildren (see, e.g., Anderson, Kaplan, & Lancaster, 1999; Anderson, Kaplan, Lam, & Lancaster, 1999; Burch & Gallup, 2001; Daly & Wilson, 1988, 1995, 1996; Hofferth & Anderson, 2003; Wilson et al., 1980).

Another evolutionarily informed hypothesis about the failure of fathers to invest in their noncustodial children is that, in short, these children may not be their own. In humans, as in all mammals, fertilization occurs internally to females. Males therefore can never be certain that the children produced by their partner is genetically their own. This is known as the adaptive problem of paternity uncertainty, and it has no parallel in human females, who can always be certain of maternity. Our male ancestors are likely to be those males who, following the dissolution of a relationship, invested preferentially in noncustodial children who were most likely to be their own genetic children. There is also evidence that children at younger ages, particularly around one year of age, tend to more closely resemble their genetic fathers than at other times (Christenfeld & Hill, 1995; Finegan, 1990; but see Brédart & French, 1999; McLain, Setters, Moulton, & Pratt, 2000; Nesse, Silverman, & Bortz, 1990). We hypothesize that resemblance shifts over time (or shifts in perceived resemblance; see Platek et al., 2002; Burch & Gallup, 2001; McLain et al., 2000) may have an effect on the reliability of child support payments, with greater father-child resemblance leading to greater and more reliable payments. No research has directly tested these hypotheses in the modern case of reduced or refused investment by fathers in noncustodial children, although the findings of Seltzer (1991) described earlier seem to corroborate this hypothesis.

Previous research indicated that child support payments are received more reliably when the former spouses have a better relationship (Arditti, 1992; Arditti & Keith, 1993; Teachman, 1991; Wright & Price, 1986). The key variable, "quality of relationship with former spouse" is not well-defined, however, sometimes asking little more than a single question about how much the parents like each other. We hypothesize that the "quality" of the former-spouse relationship—and the associated child support payments—varies with the noncustodial father's continued sexual access to the mother (see, e.g., Weiss, 1975). Previous research (reviewed in Buss, 2004b) provided clear evidence that women sometimes trade sexual access for resources and that men sometimes trade resources for sexual access. We hypothesize that continued sexual access to the mother of his noncustodial children will predict positively a man's continued investment in those children (in addition or alternatively, continued sexual access might predict negatively a man's neglect, abuse, or abandonment of those children).

# Investment by Noncustodial Fathers in Children Produced Outside of a Stable Partnership

The previous discussion presented several evolutionarily inspired hypotheses about the predictors of continued investment by fathers in noncustodial children produced in a stable, marriage-like relationship. Millions of single mothers in fact never were involved in a long-term committed relationship with the noncustodial father (see, e.g., Baker, 2000; Garfinkel, McLanahan, & Robins, 1986; Garfinkel, Meyer, & McLanahan, 1998; Wilson, 2002). Instead, many children result from short-term sexual relationships, such as brief affairs or one-night stands. Sometimes the genetic father already is married to someone else. Other times, the mother already is married to someone else. Occasionally, both members of a short-term sexual relationship may be married to other people. Reproduction as a result of these adulterous forms of short-term mating appears not to be uncommon (Baker & Bellis, 1995). For example, in a recent cross-cultural study of 53 nations, Schmitt and his colleagues (2004) documented that men from all major regions of the world commonly make attempts at short-term partner poaching (i.e., attempt to have sex with other men's partners). Moreover, men universally are more likely than women to go along with a short-term partner poach (i.e., be unfaithful themselves). We hypothesize that the same predictors of decreased or terminated investment by fathers in noncustodial children apply to children produced in these nonmarital, poaching relationships. We further hypothesize, however, that paternity uncertainty may be particularly relevant for understanding a man's investment in noncustodial children produced in a short-lived or sexually nonexclusive relationship, because in this situation the established presence of a sexual rival heightens the odds of questionable paternity.

In summary, we have presented the argument that, to complement previous research generated by disciplines such as sociology that focus on macrolevel variables, a psychological approach, in general, and an evolutionary psychological approach, in particular, may produce valuable knowledge about the determinants of child support payments. In the next section of this article, we review several proposals for improving the reliability and amount of child support payments made by noncustodial fathers.

#### HOW DO WE ADDRESS INSUFFICIENT, UNRELIABLE, OR NONEXISTENT RECEIPT OF CHILD SUPPORT BY CUSTODIAL PARENTS?

Many different proposals have been offered for how to increase the reliability with which noncustodial fathers channel child support to custodial mothers. We first review several standard social science proposals for how to increase the reli-

ability with which child support is paid. If these proposals have been implemented, we note whether research exists that has tested the effectiveness of these implemented proposals. If no such research exists, we note the likely effectiveness of such proposals, based on what we know about evolved psychology.

One proposal for how to solve the problems of child support that is widely respected by standard social scientists is what we term the "socialization proposal." This proposal states that we can increase the reliability with which noncustodial fathers pay child support by socializing or training men to appreciate that paying child support is not a "feminine" behavior, but instead that it is a "masculine" behavior, and that "real" men take care of their noncustodial children. According to the socialization proposal, noncustodial fathers in arrears for court-ordered child support, "... are not necessarily hard-hearted and narcissistic individuals. They are men faced with issues and tasks that are most difficult for them to handle effectively because of the gender-typed socialization occurring in our culture" (Fox & Blanton, 1995, p. 277).

No such socialization proposal has been implemented formally, so we cannot report the results of empirical tests of the effectiveness of this proposal. Although it is possible that some noncustodial fathers might benefit from such socialization training, a first step will have to be the provision of specific details about the sort of training envisioned. What exactly is meant by "socialization," and by "masculine" and "feminine" behaviors, for example? How specifically might such training be implemented? Who will implement this training? Who will pay for this training? What happens when a man has new children by a new partner? Does a "real" man continue paying the same amount of child support at the expense of and to the detriment of his new children, assuming a limited set of expendable resources? The socialization proposal has several difficulties with which to contend if it is to be implemented successfully.

Meyer and Bartfeld (1998) argued that we can increase payment and compliance with child support orders not only by enforcing existing orders via income withholding but also by helping men secure gainful employment. Meyer and Bartfeld (1998) reviewed previous research indicating that many men who do not meet child support obligations do not skirt these duties maliciously, but instead do not have the required income to pay, and often do not have gainful employment. According to Meyer and Bartfeld (1998), therefore, one way to increase the reliability with which child support is paid by noncustodial fathers is to provide training to underemployed or unemployed men so that they might be able to meet these child support obligations.

As with the socialization proposal, no empirical work has addressed the effectiveness of this "employment training" proposal. We suspect that job training that leads to better jobs or perhaps to any job will increase the reliability with which child support is paid by noncustodial fathers. What this proposal does not address is what to do about the majority of nonpayers or partial payers that already have the income to

make child support payments, but elect not to make these payments (see, e.g., Meyer & Bartfeld, 1996). What is needed is research at the level of psychology to better understand the decisions of these men—why do some of them make full payments, some partial payments, and some no payments at all? We are not likely to find a complete answer in the average incomes of these different groups of men. We need careful, empirical investigations of decision making by these men that include identification of the social and cultural cues to which these men are responding. Evolved psychological mechanisms require for their operation evolutionarily relevant stimuli (see, e.g., Buss, 2004a) and, therefore, a comprehensive evolutionary psychological perspective on child support payment must identify these social and cultural stimuli.

A proposal to increase the reliability with which noncustodial fathers pay child support that has been implemented involves punitive measures for failing to pay this support (e.g., revocation of driver's license) and direct withholding from paychecks and income tax returns. These enforcement policies have met with mixed success. Meyer and Bartfeld (1996), for example, provided evidence that paycheck withholding is effective, but that the bulk of benefits that might be achieved (in terms of increased reliability and amount of child support payments) already have been realized for this strategy in Wisconsin, the state from which the researchers collected the relevant information. Lin (2000) provided evidence that paycheck withholding works for those fathers that perceive that their child support obligation is not fair. For men that perceive that their child support obligation is fair, withholding the child support from their paychecks does not improve the reliability or amount of child support payments made by noncustodial fathers. Beller and Graham (1993) presented evidence that immediate withholding, criminal penalties, tax intercepts, and the ability to place liens against property increase the amount of child support paid. Baker (2000) reviewed evidence that all of these punitive and nonvoluntary payment enforcement strategies can be effective, but that they clearly are not always effective for all men who owe child support (e.g., all such enforcement strategies, including paycheck withholding and tax intercepts, can be evaded).

Lin (2000; and see Arditti, 1992) provided evidence that compliance with child support obligations is higher if noncustodial fathers perceive the obligation to be financially fair. Lin (2000) suggested, therefore, that one way to increase the reliability and amount of child support payments is to change fathers' perceptions of the fairness of the obligations. One way to increase perceptions of fairness, according to Lin (2000), is to decrease the monetary value of the obligations. An alternative method for increasing perceptions of fairness without lowering child support is

to standardize child support obligations, reduce deviations from child support guidelines, and fully implement routine income withholding. If the child support system employed more uniform guidelines and if fewer exceptions were made, a com-

pliance "climate" or "norm" might develop, similar to that in the social security and income tax systems. (Lin, 2000, p. 396)

The proposal recommended (but not yet formally implemented) by Lin (2000) is nevertheless open to social cheating (as are the social security and income tax systems), whereby some noncustodial fathers continue to avoid full or even partial payment of court-ordered child support. A key question for this proposal, therefore, will be how to monitor and punish failures to pay child support obligations in full.

#### CONCLUDING COMMENTS

Unreliable, partial, or nonexistent child support payments by noncustodial fathers is a serious social problem of the modern, industrialized world. Working from a standard social science model, sociologists and policy analysts have identified a few macrolevel predictors of who pays child support, who does not, and why some noncustodial fathers pay whereas others do not. We have argued in this article that a comprehensive understanding of child support payment or lack thereof requires, in addition to analyses at the sociological level, analyses informed by an appreciation of evolved psychological mechanisms and the adaptive problems these mechanisms were designed to solve. We reviewed several proposals that have been offered for improving the reliability and amount of child support paid by noncustodial fathers. We hypothesize that a successful social policy for rectifying the problems of child support will be built on an appreciation of and respect for human evolved psychology.

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