TRENDS IN AFRICAN AMERICAN CHILD WELL-BEING: 1985-2001*

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In many ways, after 1965 the United States became a different country for African American children than it had been in decades before. The passage of landmark civil rights, voting rights, and social welfare legislation could be expected to have important and lasting impacts on the well-being of African American children. In addition, as the United States has become an increasingly multiracial society, major concerns about child well-being have focused both on the circumstances of children's lives within specific racial groups and how these circumstances compare to the pattern and trend of improvement in all children's lives relative to the past. Social scientists should be engaged in monitoring and reporting on the condition of African American children, both because these issues are important in their own right and as a mirror to the nation about how far we have come.

The purpose of this paper is to describe trends in child well-being for African American children for the years 1985 to 2001, building upon the component social indicator time series and summary well-being indices that have been compiled by the Child Well-Being Index Project (Land, Lamb, & Mustillo, 2001; Meadows, Land, & Lamb, forthcoming). Our base year, 1985, represents the earliest time most racial data were collected on indicators of child well-being. National trends of child well-being for all U.S. children also will be presented for the same time period to compare with African American patterns and trends of child well-being.

Data sources for child well-being indicators and domains

Data sources available for the operationalization and measurement of trends in child well-being in the United States are limited, particularly for studies based on race or ethnicity. Children are less likely to be included as respondents or subjects in national surveys. Additionally, time

series data on children by racial or ethnic groups were not collected or made available until the 1980s or later. Basic demographic data on family structures and incomes for households with children under age 18 are available on an annual basis from the Annual Demographic Supplements to the March *Current Population Surveys* (BLS/BC, 2004). Additional annual data on selected mortality and other vital statistics also are available from the sample surveys and vital statistics compiled by the National Center for Health Statistics (CDC/NCHS, 2004). In addition, there are three data sources based on replications of annual sample surveys that were developed in response to the Social Indicators Movement of the 1960s and that date back to the mid-1970s: 1) the National Crime Victimization Survey, which provides data on crime victimization down to age 12 as well as data on the perceived ages of offenders (U.S. Department of Justice, 2004); 2) the High School Senior Survey, which evolved into the Monitoring the Future (MTF) Study, which provides data on illicit drug use (including cigarettes, alcohol, marijuana, cocaine, and heroin) and other teen behaviors and attitudes such as religiosity (Monitoring the Future, 2004); and 3) the National Assessment of Educational Progress (NAEP), which provides reading, mathematics, and other subject test scores from samples of children at ages 9, 13, and 17 (U.S. Department of Education, 2004).

To chart trends of child well-being for African American children we have collected 25 nationally representative time series of demographic and social indicators[1]. The indicators have been categorized into seven quality-of-life domains: material well-being, health, safety/behavioral concerns, education, place in community, social relationships, and

[1] Details about data measurement and sources are not provided in this paper. They have been published in Land, Lamb, and Mustillo (2001) and Meadows, Land, and Lamb (forthcoming). Information about the Child Well-being Indicator project can also be found on our website: http://www.soc.duke.edu/~smeadows/cwi/cwi_webpage/

emotional/spiritual well-being. Table 1 presents the list of indicators used in the project, and the ages covered by each indicator, arranged by quality-of-life domains. Time series for all of the indicators were collected for the years 1985-2001[2].

[TABLE 1 ABOUT HERE]

African Americans now occupy diverse positions in American society. However, our research on general trends indicate that African American children, on average, remain disadvantaged in a number of areas compared to national averages for all U.S. children. For example, our data show that in 2001 the African American child poverty rate of 26.6% was 1.7 times higher than the national average of 15.8%. In 2001 the infant death rate for African American infants, 14.2 deaths per 1,000 live births, was 2.5 times that of European American infants, 5.7 deaths, and the gap is not closing.

Some educational gaps are closing. We have found that by the year 2001 the high school graduation rate of African Americans (86%) was equivalent to the U.S. average (87%), and the preschool enrollment rate for African American children ages 3 to 4 (56%) slightly exceeded the

[2] Four of the time series begin after 1985, and are included in the CWI calculations the year the data are available. These indicators and the years in which their series began are: Median Family Income, 1987; Health Insurance Coverage, 1987; Preschool Enrollment, 1990; and Residential Mobility, 1988. Additionally, three of the indicators are not recorded annually: NAEP Reading Tests (1988, 1990, 1992, 1994, 1996, and 1999), NAEP Mathematics Tests (1986, 1990, 1992, 1994, 1996, and 1999), and Voting in Presidential Elections (1988, 1992, 1996, and 2000). Linear interpolation is used to complete the missing years.

national average (54%). However, college graduation rates for persons aged 25-29 indicate that in 2001 African Americans still lag behind the national average, 18% versus 29%.

Although we will compare African American and national rates as we examine trends in child well-being, it is not the goal of this paper to focus on the disparities of African American children as compared to national averages or other racial subgroups, such as European Americans. We acknowledge that it is very important to study the gaps in child well-being between different racial or ethnic groups, and throughout this paper we discuss various disparities that African American children experience, as reflected in the social indicators we examine. However, it is difficult to develop a single metric that measures racial disparities of child well-being because one group, such as African American children, does not consistently do worse than a comparison group, such as the U.S. average or European American children, for all of the social indicators that we use in the child well-being index. For example, African American 12th graders are less likely to smoke cigarettes, use illicit drugs, or drink alcohol compared to European Americans. We are in the process of developing measures of group disparities in child well-being that will be useful and informative. However, the purpose of this paper is to focus on *trajectories of change* in African American child well-being from 1985 to 2001, and to compare such trajectories with those for all U.S. children.

The child well-being index (CWI): methods of construction

Since the 1960s, researchers in social indicators and quality-of-life measurement have argued that well-measured and consistently collected social indicators provide a means to monitor, over time, the condition of groups in society, including children and families (Land, 2000). The information that is provided from social indicators can be instrumental in impacting

how we think about important issues in our personal lives and in the life of the nation. Indicators of child and youth well-being are used by numerous groups—including child advocacy groups, policy makers, researchers, the media, government agencies at all levels, and service providers—for a variety of purposes. Social indicators can be used to describe the condition of children, to monitor or track child outcomes, and to set goals for the future.

In the case of overall child well-being, there are multiple indicators of well-being to be compared (Pollard & Lee, 2003). Over any period of years, some indicators of child well-being likely will have risen and some will have fallen. The problem is how to combine the relative changes in many indicators pertaining to child well-being into a single number that can meaningfully be interpreted as a measure of the relative change over time in a fairly comprehensive selection of social conditions encountered by children and young people.

In its broadest sense, an index number is a measure of the magnitude of a variable at one point (such as a specific year that is termed the *current year*) relative to its value at another point (called the *reference* or *base year*). Index numbers are widely used in economics, such as the Consumer Price Index (CPI), to compare the general price level of goods at different points in time. Although persons may not consume all of the items used to calculate the CPI, most consumers are interested in how general price levels are changing and fluctuating. Similarly, in any given year no single child encounters all of the social conditions that are part of the overall Child Well-being Index (CWI) that we develop in this project. However, fluctuations over time in the CWI can be interpreted as signaling changes in the overall social context of social conditions encountered by children and youth. Such changes would be of interest to policy makers, officials, adults, parents, and young persons to understand how well children and youth are doing at one point in time, say 1999, compared to another point in time, such as 1985.

As noted, the variable, or index number, to be compared over time is the overall well-being of children in the United States—defined in terms of *averages of social conditions encountered by children and youth.* The statistical theory of index numbers deals with the development and assessment of functional forms or aggregation functions for the construction of indices (Jazairi, 1983). In this project, index formulas of the following type are applied:

$$\textit{Index of Child Well-Being in Year } t = (1/N)\ \Sigma_i\ \{100 + [(\Delta R_{it} / R_{ir}) \times 100]\}, \qquad (1)$$

where N denotes the number of basic indicators on which the index is based, R_{it} denotes the i^{th} child well-being indicator rate in the year $t > r$, R_{ir} denotes the i^{it} rate in the *reference or base year r*, R_{it} and R_{ir} are called *rate relatives*, and the summation is taken over N indicator rates. In Equation (1), $\Delta R_{it} = R_{it} - R_{ir}$ denotes the numerical value of the *finite-difference* or *change* in indicator *i* from the base year *r* to year *t.* Each change rate ratio in Equation (1) is multiplied by 100 in order to measure the percentage change in the rate from the base year value. In index number terminology, the formula in Equation (1) is a *mean of percentage change rate ratios index*, is additive, and applies equal weights to all component rates. There is little consensus among social scientists, policy makers, and others, on methods for aggregating and weighting components of well-being types of scales. However, research by Hagerty and Land (2004) found that equally weighting components of well-being scales is the most appropriate way to create such scales because this method promoted greatest agreement among individuals evaluating the scales.

As Table 1 shows, both positive and negative indicators are used in constructing the CWI. Positive indicators are those in which higher numbers denote improved conditions, such as median family income or high school graduation rate. Negative indicators are those in which higher numbers signify worsening conditions, such as infant death rate or cigarette smoking rate.

In order to track indicator trends in a consistent manner the change rate ratio values for positive indicators will be added to the base year index of 100 and the change rate ratios for negative indicators will be subtracted from the base year index of 100. The trend of indicator performance relative to the base year value will then be in the same direction regardless of whether the particular indicator is positive or negative. Therefore, index values for years subsequent to the base year that are greater, equal, or lesser than 100, indicate "improvement," "no change," or "deterioration" in the time series relative to its base year value. For example, the African American index value for child poverty is 131 in the year 2000; this means that in 2000 there was a 31% improvement in the African American child poverty rate relative to 1985.

There are three steps in the development of our child well-being indices, and these steps have been taken with regard to African American children and all U.S. children. First, the basic well-being indicators cited in Table 1 are grouped by the domain categories and Equation (1) is applied to each indicator series within the well-being domains for African American children and for all U.S. children. For example, for the material well-being domain, Equation (1) would be applied separately to the rates of child poverty, median family income, secure parental employment, and health insurance coverage. Then the arithmetic average of the domain-specific indicators is calculated to obtain the CWI trends for each of the seven domains[3]. Finally the

[3] There is more over-time variability in the domain-specific trends for African American children due to more statistical variability from smaller populations. To reduce the year-to-year variability so that trends can be more easily deciphered, we applied three-year moving averages to the domain-specific indices for both the African American and U.S. children.

arithmetic average of the seven domain-specific child well-being indices is calculated to obtain an overall summary child well-being index for African American children and for all children.

As noted above, 100 is used as the reference point for the base year (1985) and the values of the indices for subsequent years are presented as a percentage of this base year value. Thus, an index value that is greater than 100 for a subsequent year indicates improvement compared to 1985 and a value less than 100 indicates deterioration compared to the base year. Figures will be presented showing the domain trends in child well-being for African American and for all U.S. children. Each trend line indicates the trend for the group as compared with that group's status in 1985.

Findings: domain-specific trends

Figure 1 presents trends in the *Material Well-Being* domain. The material well-being domain represents resources that families are able to provide for their children. The indicators used to represent material well-being include child poverty rates, median family income, secure parental employment (having at least one parent employed full-time year-round), and health insurance coverage. Both African American children and all U.S. children follow a similar trend in that conditions are rather stable until 1989, deteriorate with the economic recession of the early 1990s until around 1993, and improve through 2001. The lower levels of material well-being during the early 1990s were due to higher rates of child poverty (39% for African American children and 22% for the national average) and lower median family incomes. Families were having a harder time providing for their children during this recessionary period.

[FIGURE 1 ABOUT HERE]

The consequences of poverty during childhood are far reaching, resulting in potential deprivation of basic necessities of food, housing, and clothing (see e.g., Duncan & Brooks-Gunn, 1997). A number of studies show that children living in poverty experience poorer health outcomes and compromised cognitive development through their formative years (Aber et al., 1997; Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997; Dawson, 1991; Goodman, 1999; Guo, 1998; Guo & Harris, 2000; McLoyd, 1998; Montgomery, Kiely, & Pappas, 1996; Smith, Brooks-Gunn, & Klebanov, 1997), and the parents also experience emotional distress and hardship (McLoyd, 1990). Additionally, research findings indicate that poor children are more likely to have school behavioral problems, get lower grades, drop out of school, become pregnant as teenagers, and do worse in the labor force as adults (Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997; Duncan & Brooks-Gunn, 1998; Gershoff et al., 2002; Haveman & Wolfe, 1995; Mayer, 1997; Smith, Brooks-Gunn, & Klebanov, 1997; Zedlewski, 2002).

African American children show greater improvement in material well-being, compared with the trend for all children, in that the African American children's level of material well-being in 2001 is 22% greater than in 1985, while the national trend improved 11%. The African American improvements are due to reductions in child poverty rates (from 36% in 1985 to 27% in 2001), and increases in rates of secure parental employment (from 48% to 65%) and median family income (from $25,281 in 1987 to $30,339 in 2001, calculated in 2001 dollars). The African American trends, however, continue to be well below the national and European American averages. Nationally, the child poverty rates in 1985 and 2001 were 20.1% and 15.8%, and the European American rates were 13.3% and 10.9%, respectively. The median family income, in 2001 dollars, for U.S. families with minor children was $46,151 in 1987 and $51,407 in 2001. For European American families the numbers are $51,524 and $60,861.

In the late 1990s states were able to create State Children's Health Insurance Programs (SCHIP) to provide health insurance coverage for children in families that were ineligible to be covered by Medicaid. Research indicates that uninsured children enrolled in SCHIP benefit through improved access, continuity and quality of health care (Szilagyi et al., 2004). Unfortunately, many eligible children are not being covered by SCHIP due to administrative hurdles, waiting periods, and other barriers (Fairbrother, et al., 2004; Kronebusch & Elbel, 2004). Since 1997, there has been an increase in privately funded health insurance coverage for African American and all U.S. children, and a decline in publicly funded health insurance coverage. Thus total health insurance coverage, either publicly or privately funded, has changed very little over the period under study and is over 80% for both African American children and all children.

Trends in the *Health Domain* are shown in Figure 2. Indicators in the health domain consist of parental assessment of child's limitations in performing daily activities due to chronic health conditions, low birth weight rates, infant death rates, and child death rates. African American children experienced declines in health between 1988 and 1993, compared to 1985 levels. The indicator that most influences this downward trend is the increased rate of reported activity limitations due to chronic health conditions. In 1985, 5.8% of African American children ages 0 to 17 were reported to have activity limitations. In 1994, the rate rose to 8.9%. Since that time the rate has shown a bumpy decline to just less than 7% in 2001. The national trend of children with activity limitations also increased during the early to mid 1990s; however the increase was not as steep as that for African American children. Nationally, the 1985 level was 5.1%, which increased to a high of 6.7% in 1994, and has since stabilized to approximately 6%.

[FIGURE 2 ABOUT HERE]

Both the African American and U.S. trends for activity limitations are higher in 2001 than they were in 1985, indicating a somewhat higher rate of reported health problems, particularly asthma, neurodevelopmental disorders, such as mental retardation, and learning-behavioral disorders, such as attention-deficit disorders (Newacheck & Halfon, 1998; Msall et al., 2003). Given the increasing poverty rate and declining economic status of families from 1990 to 1994, it is likely that economic factors were contributing to the increased trends of activity limitations of children in the United States. Studies have documented a significant link between childhood poverty and activity limitations, physical disablement, health problems and chronic conditions that lead to disabilities (Alaimo et al., 2001; Goodman, 1999; Hogan et al.1997; Montgomery, Kiely, & Pappas, 1996; Newacheck & Halfon, 1998; Newacheck et al., 2003). Racial disparities exist in children's rates of disability and poor health, although much of the disparities are due to poverty, family structure, and use of health care services (Elster et al., 2003; Flores et al., 1999; Montgomery, Kiely, & Pappas, 1996; Newacheck et al., 2003).

Since 1993 there has been an upward trajectory in the overall trend of African American children's health well-being, primarily due to reductions in infant and child death rates. Infant death rates record the number of deaths of infants before their first birthday. For African American infants, this rate has dropped from 19.0 to 14.2 per 1,000 live births between 1985 and 2001. Child death rates are the annual number of deaths to children aged 1 to 14, and between 1985 and 2001 that rate has dropped from 58.1 to 41.8 per 100,000 African American children in those age groups. At the national level, declines in infant and child death rates also contributed to improved overall child health well-being from the mid 1990s to the end of the series. By 2001,

the overall health well-being of African American children had improved 7.5%, which is close to the rate of improvement in health well-being for all U.S. children, at 9.4%.

Although the health of African American children has improved since 1985, their health lags behind that of the national averages. African American infants have much higher infant mortality rates (IMRs) compared to European American infants. In 2001 the African American IMRs of 14.2 deaths per 1,000 live births is 2.5 times greater than the European American rate of 5.7 deaths. Recent research has indicated that most of the African American-European American gap in IMR is due to economic factors, including income and mother's education, as well as timing and frequency of prenatal health care, mother's health and behavior (e.g., smoking, drinking alcohol), and the adverse birth outcomes, such as low birth weight (Hummer, 1993; Hummer et al., 1999). Another factor contributing to the racial disparities in IMRs are differences in rates of breastfeeding in the first year of life (Forste, Weiss, & Lippincott, 2001).

African Americans also have higher proportions of births that are low birth weight (LBW), which is less than 2,500 grams (5.5 pounds). The percent of LBW births has been increasing over the time series, and the disparity between African American and European American LBW rates has not decreased (Branum & Schoendorf, 2002; Muhuri, MacDorman, & Ezzati-Rice, 2004). Between 1985 and 2001, the rate of African American LBW rose from 12.6% to 13.1%, which is significantly higher than the national rate of 6.8% and 7.7%, or the European American rates of 5.6% and 6.8%, for the same years. As with infant mortality rates, lower socioeconomic status is strongly associated with LBW rates (Starfield et al., 1991). However, controlling for economic disparities, prenatal care, and maternal characteristics fails to fully explain the higher African American LBW rates (Frisbie et al., 1997; Kleinman & Kessel, 1987; Shiono et al., 1986; Starfield et al., 1991). Studies of Chicago neighborhoods have shown

that important neighborhood characteristics, such as the presence of violence, poverty, perception of social support, and percent African American, help to account for LBW births to African American mothers (Buka et al., 2003; Morenoff, 2003; Roberts, 1997). Low birth weight is an important long-term health issue because research has associated LBW, particularly very low birth weights of less than 1500 grams, with developmental problems in cognition and neuromotor functioning, disabilities, hyperactivity, and school problems (Avchen, Scott, & Mason, 2001; Behrman, Rosenzweig & Taubman, 1994; Boardman et al., 2002; Conley & Bennet, 2000; Hack et al., 1995; Hediger et al., 2002; McCormick, Gortmaker, & Sobel, 1990).

Figure 3 shows trends in the *Safety/Behavioral Well-Being Domain*, which are based on indicators of rates of serious violent crime victimization for youth aged 12-17, teen births for girls aged 10-17, and consumption of cigarettes, illicit drugs, and alcohol by 12th graders. For African American children the safety/behavioral well-being trend deteriorated in the late 1980s, primarily due to large increases in the rate of serious violent crime victimization. In 1985, the rate of African American children aged 12 to 17 who were victims of aggravated assault, rape, robbery, or homicide was 35.2 per 1,000. By 1990 the rate had peaked at 77.0 per 1,000. Since 1993, the rate of serious violent crime victimization for African American youth has dropped to a low of 23.4 in 2000 (the 2001 data are not available at this time). The national average for serious violent crime victimization in 1985 was 34.3 per 1,000. It rose to a high of 43.2 in 1990, and has declined to 16.3 in 2000.

[FIGURE 3 ABOUT HERE]

Beginning around 1985 there was an "epidemic" (Cook & Laub, 1998; 2002) of youth violence in the U.S., which peaked in 1993 and then declined precipitously. The youth violence epidemic has been attributed to the increased use of handguns rather than knives or fists to settle disputes, particularly among African American males under the age of 25 (Blumstein, 2002; Cook & Laub, 2002). More guns came into the hands of youth due to the growing crack cocaine market during the 1980s, which recruited young people who were willing to work for lower wages, were prone to take more personal risks than adults, were less vulnerable to the penalties of the adult justice system, and who could then afford to buy and use guns for protection (Blumenstein, 1995; Cork, 1999; Grogger & Willis, 2000). The explanation for the steep drop in violent crimes by youth since 1993 is less clear (Blumstein & Wallman, 2000; Cook & Laub, 2002). The decline in the crack market has reduced the need for young drug sellers with guns (Johnson et al., 2000c). There has been a reduction in the proportion of teens that are carrying handguns due to more aggressive police tactics in the pursuit of illegal weapons, more community activities to reduce gang violence and negotiate treaties among gangs, and changing community norms that discourage teens from carrying and using guns (Blumstein, 2002; see also Freed et al., 2001; Molnar et al., 2004). Additionally, with the economic recovery of the mid-1990s, jobs were more readily available and more young people found employment in the legitimate sector (Blumstein, 2002).

The initial deterioration for African American safety/behavioral well-being also was due to increases in teen birth rates for the late 1980s and early 1990s. In 1985, the birth rate for African American girls aged 10-17 was 36.9 births per 1,000 girls. It reached a peak of 43.6 births in 1990. These rates declined markedly at the end of the 1990s to 23.0 births in 2001, which contributed to a much-improved trend in safety/behavioral well-being for African

American children. The birth rates for all U.S. girls aged 10-17 was 16.1 in 1985, reaching a high of 20.1 in 1990, and falling to 13.0 in 2001.

The decline in teen birth rates in the 1990s was accompanied by a decline in teen pregnancies, which are based on rates of births, fetal losses (stillbirths and miscarriages), and abortions (Ventura, Matthews, & Hamilton, 2001), thus fewer teenaged girls are getting pregnant in the 1990s. The reduction in teen pregnancies and births during the 1990s was due to a number of factors. Between 1991 and 2001 there was a 16% increase in the percent of all teens in grades 9 to 12 who report that they had never been sexually active, with a 35% increase for African American teens (CDC, 2002). Of those teens that were sexually active there was a 35% increase in the reported use of condoms, and a 40% increase for African Americans (CDC, 2002). Additionally, there was a 23% reduction in African American adolescents that report that they are "currently sexually active" whereas there was little change in this rate overall.

Other factors that contributed to improved safety/behavioral well-being trends for African American children in the late 1990s were reductions in the consumption of cigarettes, illicit drugs, and alcohol by 12th graders. Overall, African American youth showed greater improvements in safety/behavioral concerns at the end of the period under study as compared with the U.S. national trends, 26.8% vs. 19.4%.

The *Education Domain* of the child well-being index was created to represent educational achievement. The CWI uses indicators of children's achievements with respect to their schooling activities based upon levels and trends in average test scores in the reading and mathematics tests administered as part of the continuing National Assessment of Educational Progress series for children ages 9, 13, and 17, which is conducted by the U.S. Department of Education's National Center for Education Statistics (2004). The educational well-being trend, presented in Figure 4,

is composed of the changes in the average of the three age group-specific scores for both reading and mathematics. For the most part, there has been little sustained improvement in these scores for U.S. students or for African American students. At the end of the time series, the U.S. average indicates only a 1.7% improvement over 1985 test scores. African American students showed some improvements at the beginning of the time series, but their scores dropped from 1988 to 1992, primarily due to declines in reading scores. Their scores were flat through most of the 1990s, and show a downward trend at the end of the series due to declines in both math and reading scores, particularly for 17-year olds.

[FIGURE 4 ABOUT HERE]

These data point to a disturbing trend—that African American students may be falling further behind in educational achievement, particularly in comparison to European American children. The largest African American-European American difference in reading scores occurs for 9-year olds. In 1988 the average reading score of African American 9-year olds was 29 points lower than that of European Americans. By 1999 the gap had grown to 35 points. It is likely this gap reflects the effect of racial differences in school readiness. Research has shown that on average African American children start first grade a year behind European American students in vocabulary knowledge and skills, primarily due to the effects of poverty and limited family resources (see Farkas, 2003). The racial differences in reading test scores are not greatly reduced for the older students in that the 1999 African American-European American gap for 13- and 17-year olds was 29 and 31 points, respectively. The largest racial gap in math test scores was for the 13-year olds during the early to mid-1990s. However, by the end of the 1990s both 13- and

17-year old African American students averaged 30 to 32 points behind European American math test scores. The racial gap in learning for older students has been attributed to a number of factors including opportunities for learning, such as courses taken, teacher perceptions and actions, and school environment, curriculum/tracking, and resources, and student efforts to learn (Farkas, 2003). Discrimination in the allocation of resources to minority students and minority schools also has been cited as an important factor contributing to racial differences in academic achievement for all grade levels (Farkas, 2003; Michelson, 2001, 2003).

The *Place in Community Domain* indicator series broadly represents participation in age-appropriate activities associated with major societal institutions. The indicators refer to children's attachments to such productive activities as schooling and work, and participation in the electoral process. Specifically, we use the rates of preschool enrollments for ages 3-4, receipt of high school diploma for ages 18-24, inactivity (not working or in school) for ages 16-19, receipt of bachelor's degree for ages 25-29, and voting in Presidential elections for ages 18-24.

Figure 5 presents the trends for the place in community domain. African American children show improvement through the time series, with the exception of the early 1990s in which they experienced a temporary drop in the series. This drop from 1990 to 1992 was due to declines in the rates of preschool attendance for children aged 3 to 4 and college graduation for persons aged 25 to 29, and an increase in the rate of inactivity for youth aged 16-19. Since 1993, the trend in the place in community domain has risen steadily for African American children, resulting in a 25% improvement in 2001 over the 1985 levels.

[FIGURE 5 ABOUT HERE]

The African American trend for the place in community domain rises more sharply than that for all U.S. children, which registers a 10% improvement in 2001 over 1985 levels. The major indicators contributing to the African American trend of improvement have been larger increases in preschool enrollments (up 62% in 2001 compared to 1990) and college graduation rates (up 54% in 2001 compared to 1985). The trend for African American high school graduation rates rose slowly from 81% in 1985 to 86% in 2001, which is now comparable to the U.S. average.

Our data indicate that young children are spending more time in non-family child care and preschool programs. In 2001, 59% of African American children and 55% of all U.S. children aged 3 to 4 were enrolled in preschool programs. There are questions regarding the adequacy and benefits of such care. Research indicates that child care programs can benefit child outcomes, including cognitive abilities, language development, and academic achievement in grade school, particularly for poor children; however, such benefits are strongly affected by the quality of child care programs (Anderson et al., 2003; Currie, 2001; Loeb et al., 2004; Love et al., 2003; NICHD Early Child Care Research Network, 2000; NICHD Early Child Care Research Network & Duncan, 2003; Peisner-Feinberg et al., 2001).

The early 1990s saw an increase in youth aged 16 to 19 who were neither working nor in school. In 1991 and 1992 the rates for African American adolescents was 16.8% and 16.9%, and the national rates were 10.5% and 10.1%. Such rates of disconnected youth were lower than the 1985 rates of 18.1% and 11.1%. With the economic expansion of the 1990s there was a steady decline in the rate of inactivity for African Americans and all youth. In 2001, the rates were 14% and 9%, respectively.

The *Social Relationships Domain* represents a child's circle of intimate and supportive relationships with family and friends. This is a difficult domain to track due to the lack of appropriate measures reflecting social relationships available at the national level over time. Two indicators are used: single-parent headed families and residential mobility for children under the age of 18. Both measures represent possible disruptions or reductions in one's circle of family members and friends and other community connections, which are all part of one's social capital, and both measures are found to be interrelated.

Social science research has found that children in single-parent households are less likely, on average, to have regular, open, and pleasant contact and associations with members of both sides of their biological parents' families than are children in families with both parents present (Furstenberg & Cherlin, 1991; King, 1994; Mott, 1990; Seltzer & Brandreth, 1994). Additionally, children in single-parent families are more likely to grow up in poverty, have cognitive and behavioral problems as youth, and have less parental supervision, especially from fathers (see McLanahan, 1997). Children in single-parent families experience higher incidences of residential mobility as compared to children in two-parent families (London, 2000; South, Crowder, & Trent, 1998). Moving residences and/or schools can disrupt regular contact with friends, classmates, and the community, and it has been associated with negative impacts on social capital, school achievement and other child outcomes, particularly for children in single-parent households (Adam & Chase-Lansdale, 2002; Coleman, 1988; Hagan, MacMillan & Wheaton, 1996; Mehana & Reynolds, 2004; Pettit & McLanahan, 2003; Pribesh & Downey, 1999; Tucker, Marx, & Long, 1998; Wood et al., 1993), although part of the negative effects of moving may be due to selection effects in that the movers may be more disadvantaged than those who do not move (Pettit & McLanahan, 2003; Pribesh & Downey, 1999). A study of college

students who were children of divorced parents found that if either parent moved after the divorce the students were more likely to experience a variety of negative effects, including more hostility in interpersonal relations, poorer emotional and general health, less financial support from parents, and less favorable perceptions that their parents were sources of emotional support and role models (Braver, Ellman, & Fabricius, 2003). Residential moves during childhood also have been negatively associated with physical and mental health in midlife (Bures, 2003).

[FIGURE 6 ABOUT HERE]

As Figure 6 indicates, the social relationship domain trends for African American and all children have tracked below the 1985 levels for most of the period under study. Much of the pattern of greater decline for African American children is due to changes in the annual rates of residential mobility for minor children. In 1988 (the first year that these data are available) 18.8% of all African American children moved residences. The next year the rate jumped to 23.2%. Since that time the annual residential mobility rate has fluctuated, averaging over 21%. The trend of African American children living in single-parent households increased slightly during the middle of the period. Approximately 54% were in single-parent households in 1985. The rate increased to 58% in 1991, and hovered around 57% from 1992 through 1997. Since that time the rate has been dropping such that in 2000 and 2001 the rate was 53%.

The national trend for the social relationship domain has not declined as greatly as that of African American children because the general U.S. trend for residential mobility for children has declined from 18.9% in 1988 to 15.2% in 2001. There have been increases in the U.S. trend for percent of children living in single-parent families from 23.4% in 1985 to over 27% from

1991 to 1997. Since that time the national rate of children living in single-parent households has dropped under 27%.

The *Emotional/Spiritual Well-Being Domain* was developed to track children's emotional and psychological health, morale, and spiritual well-being. This domain also is difficult to capture with currently available time series of child well-being indicators. As shown in Table 1, three measures are used: rates of suicide for adolescents aged 15 to 19, and rates of weekly religious ceremony attendance and self-reported spiritual attitudes for 12th graders.

In a review of psychological autopsy studies of youth suicides and epidemiological studies of youth suicidal behaviors, Gould and Kramer (2001) found the risk factors for youth suicide to be significant psychiatric problems, including depressive disorders, substance abuse, and previous suicidal behavior. Stressful personal life events, and high rates of parental psychopathology, especially depression and substance abuse, also were found to be associated with youth suicide attempts and completions. Additionally, adolescents who were drifting—not working or in school—were at higher risk of committing suicide.

Religion has been found to have a positive effect on a number of domains in the lives of adolescents, including physical and emotional health, school work and educational outcomes, volunteering and political involvement, family well-being, and avoidance of risky behaviors such as drinking, drug use, sexual activity, and delinquency (see review by Regnerus, 2003). Religious beliefs and participation in religious services have proven to be effective buffers against delinquent behavior for high risk youth (Johnson et al., 2000a; 2001), for high risk youth exposed to violence (Pearce et al., 2003b), for African American adolescents in disordered neighborhoods (Johnson et al., 2000b), as well as for low risk youth (Regnerus & Elder, 2003). Regarding emotional well-being, research indicates that higher levels of religiousness, including

attendance, personal faith, and positive religious experiences, is associated with lower levels of depressive symptoms (Pearce et al., 2003a). Additionally, religious involvement has been associated with lower levels of suicide ideation and attempts (Donahue & Benson, 1995; Greening & Stoppelbein, 2002; Nonnemaker et al., 2003).

[FIGURE 7 ABOUT HERE]

Figure 7 shows African American and U.S. trends in emotional and spiritual well-being. In general, the African American trend takes a "U" shape in that the trend declines to 1993-1994, and then improves since that time. The African American downward trend is very pronounced, declining over 27% in 1993, compared to the 1985 base year, before tracking upward after that time. This large drop was due to a marked increase in suicide rates for teens aged 15-19. In 1985 the suicide rate for African American teens was 4.9 per 100,000 teens. In 1992, 1993, 1994, and 1995 the rates had jumped to 8.4, 8.0, 9.6, and 8.1 suicides per 100,000 teens, respectively. Since that time, African American suicide rates have dropped to 5.6 in 2000, and the trend of emotional/spiritual well-being has increased accordingly. The initial decline in the U.S. trend in emotional/spiritual well-being is less pronounced because there was not the dramatic rise in suicide rates as compared with the African American trend. In the U.S. in 1985, 9.9 teens per 100,000 committed suicide, which was double the African American rate of 4.9 for 1985. The U.S. teen suicide rate rose to around 11 between 1988 and 1994, after which time the rate dropped to 8.2 in 2000, which continues to be much higher than the African American teen suicide rate.

Suicide rates for African American youth have always been lower than that of European American youth. The spike in suicide rates for African American adolescents to the early 1990s, which narrowed the gap between African American and European American youth, was cause for concern (CDC, 1998). The heightened suicide rates during the late 1980s and early 1990s for 15 to 19 year olds were due to increased rates of suicides for males of all races; as the female rates were quite stable (Gould & Kramer, 2001). The rise in the suicide rates of African American adolescent males has been linked to the general increase in lethal youth violence due to the growing number of teens carrying handguns or having access to firearms, as we described earlier (CDC, 1998; Fingerhut & Christoffel, 2002; Joe & Kaplan, 2001; Kaplan & Geling, 1998; Woods et al., 1997), and due to firearms being present in the home (Willis et al., 2003). The CDC (1998, p. 194) reported that "firearm-related suicides accounted for 96% of the increase in suicide rate [between 1980 and 1995] for blacks aged 10-19 years." Nationally, the rate of firearm-related suicides by adolescents has declined between 1992 and 2001 (CDC, 2004). Research also has found cocaine use to be associated with suicides by African American adolescents (Marzuk et al., 1992; Willis et al., 2003; Woods et al., 1997).

Since the mid 1990s, there also have been modest increases in the percent of African American 12th graders who attend religious services weekly as well as report religion to be very important, which also has contributed to their improved trend of emotional/spiritual well-being. The upswing in the national trend of emotional/spiritual well-being since 1989 primarily is due to increases in the percent of 12th graders who report that religion is very important. The national trend of 12th graders attending religious services on a weekly basis has tracked below the 1985 level of 35.3% for the entire period of study. However, there was an increase in the rate of

African American 12th graders attending religious services over the period of study. In 1985, 36.3% reported attending religious services, and in 2001 the rate had risen to 44.3%.

Figures 8 and 9 show the trends for all seven domains for African American and all U.S. children, respectively. The same scale is used for both figures to illustrate that there is much more fluctuation in the African American trends as compared with those of the U.S. A number of the African American trends initially decline until 1992 or 1993, and then show great improvements after that time. The safety/behavioral concerns, place in community, and material well-being domains each exhibit improvements of over 20% compared to 1985 levels. The health and emotional well-being domains also have an upward trajectory such that their levels are now above those in 1985. The U.S. trends show less fluctuation over the period under study, and except for safety/behavioral concerns, the 2001 improvements are rather modest compared to 1985 levels.

[FIGURES 8 AND 9 ABOUT HERE]

Findings: trends in summary indices

Figure 10 presents summary child well-being indices, which are the arithmetic average of the seven domains for each group. The indices show that, compared to 1985 levels, the overall well-being of African American children declined to a low point in 1993. This is not surprising since the trends for the health and emotional/spiritual domains were lowest in 1993, and the trends for material well-being, educational, and place in community domains were lowest in 1992, as can been seen in Figure 8. After 1993, the summary trend for African American child well-being improved at an accelerated rate such that their trend of improvement outpaces the

U.S. trend. The data indicate that by the year 2001 African American children had experienced an 11% overall improvement in child well-being, compared to 1985. The national CWI trend shows little improvement until 1993-94, at which time the trend begins to track upward. Nationally, child well-being improved approximately 9% in 2001 compared to the 1985 level, which is slightly lower than the African American end point. Improvements in material well-being, health, and safety/behavioral domains contributed to the accelerated African American trend of improvement in the late 1990s.

[FIGURE 10 ABOUT HERE]

Discussion

The early 1990s mark the low point in our examination of African American child well-being. The U.S. was in a recession and African American families felt the economic consequences: over 39% of African American children were living in poverty, median family income was at its lowest point in the period under study, less than 50% of African American children had at least one parent working full-time year-round, and 58% of African American children were living in single-parent families. Such depressed economic conditions resulted in a larger number of African American teens who were neither working nor in school, and slightly reduced graduation rates from high school and college. During the 1990s, there also was an increase in the rate of African American children with activity limitations, which has been found to be more prevalent among children in poor households.

The economic expansion of the late 1990s had a positive effect on the well-being of African American children. Families were doing better economically and were able to provide

more resources to their children, as indicated by the upward trend in material well-being. In turn, there was great progress in the place in community domain, which represents connections to mainstream social institutions and appropriate social roles. More African American young children were enrolled in preschool, and graduation rates from high school and college increased as well. Education increases an individual's human capital and it also increases social capital through maintaining a connection to educational institutions and the community. Such connections create opportunities to form social ties with others, which could be utilized in later life. Coupled with the trend of improvements in material well-being and place in community domains have been advances in safety/behavioral well-being and emotional/spiritual well-being domains. African American teen birth rates, alcohol consumption rates, and suicide rates have dropped, and there has been an increase in rates of weekly attendance to religious services and self-reported religiosity. Clearly, a more favorable economic climate benefits African American children and families in a number of different ways.

Despite the general improvement in African American child well-being over the period of study, there remain serious disparities and disadvantages for such children compared to U.S. averages, and particularly in comparison with European American children. Much of the racial disparities can be attributed to the effects of poverty. However, as we have noted throughout the paper, poverty alone does not fully explain the racial differences and disparities that have been found in many of our measures of child health and development, educational progress, and other indicators of child well-being. More research is needed to identify causes of racial disparities in child well-being, and to find solutions to decrease such differences.

Some intervening factors that we are not able to study more fully are the impacts of connections to family and social institutions in buffering the effects of poverty, inappropriate

peers, violent neighborhoods, and other disadvantages. Studies using the National Longitudinal Study on Adolescent Health (AddHealth) of students in grades 7 to 12 indicate that students are less likely to engage in risky behaviors when the students are more connected to parents, family, and school (Resnick et al., 1997; Sieving, McNeely & Blum, 2000). As noted earlier, religion exerts a positive effect on many areas of children's lives (Regnerus, 2003). Parental involvement has been found to partially counteract the negative effects of violent neighborhoods on children's behavior and psychological well-being (Ceballo et al., 2003; Pearce et al., 2003b). Research on families in poverty indicate that mother's self esteem may help shield African American children from some of the ill effects of poverty (McLeod & Nonemaker, 2000).

Social indicators, while fundamental, do not completely determine any social reality, and this leads to several concluding thoughts. First, it is not known how much society's increasingly sophisticated methods for detecting and identifying certain conditions contribute to the rise in an indicator over time. For example, the incidence of child abuse may not actually be higher than before 1985, but because of the existence of programs designed to identify this and other conditions, authorities may be reporting it more. Such factors affect our decisions regarding the types of indicators we use in our study. Second, further research, particularly on the spike in African American teen suicide and the role of church attendance in African American family life over time, is needed. Other areas, where African American children and youth seem to be "outperforming" the U.S. average on cigarette smoking, alcohol consumption, and teen birth, also deserve closer looks. Finally, beyond the need to investigate further some of the trends presented here is the importance of developing, validating, and collecting a more complete set of measures in the emotional/spiritual and the social relationships domains. These areas of social life are too important to go un-measured, measured partially, or measured poorly. All American

children deserve a comprehensive and unflinching look at their own (average) well-being over time.

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Table I. Component Domains of Child Well-Being Indices[a].

I. Material Well-Being
   1. Rate of Children in Poverty
   2. Median Family Income (in 2001 dollars)
   3. Secure Parental Employment Rate
   4. Rate of Children with Health Insurance Coverage

II. Health
   1. Rate of Children with Activity Limitations
   2. Low Birth Weight Rate
   3. Infant Mortality Rate
   4. Child Mortality Rate, Ages 1-14

III. Safety/Behavioral Concerns
   1. Rate of Cigarette Smoking, Grade 12
   2. Rate of Alcoholic Drinking, Grade 12
   3. Rate of Illicit Drug Use, Grade 12
   4. Teen Birth Rates, Ages 10-17
   5. Rate of Victimization of Serious Violent Crimes, Ages 12-17

IV. Educational Well-Being
   1. Reading Test Scores, Age 9, 13, and 17
   2. Math Test Scores, Age 9, 13, and 17

V. Place in Community
   1. Preschool Enrollment Rate, Ages 3-4
   2. Rate of Persons Receiving High School Diploma, Ages 18-24
   3. Rate of Youth Not Working or in School, Ages 16-19
   4. Rate of Persons Receiving Bachelor's Degree, Ages 25-29
   5. Rate of Voting in Presidential Elections, Ages 18-24

VI. Social Relationships
   1. Rate of Children Living in a Single Parent Household
   2. Rate of Children Who Have Move in the Past Year

VII. Emotional Well-Being
   1. Suicide Rate, Ages 15-19
   2. Rate of Weekly Religious Ceremony Attendance, Grade 12
   3. Percent Who Report that Religion is Very Important, Grade 12

Note:

[a]Unless otherwise noted, the indicators refer to children ages 0-17.

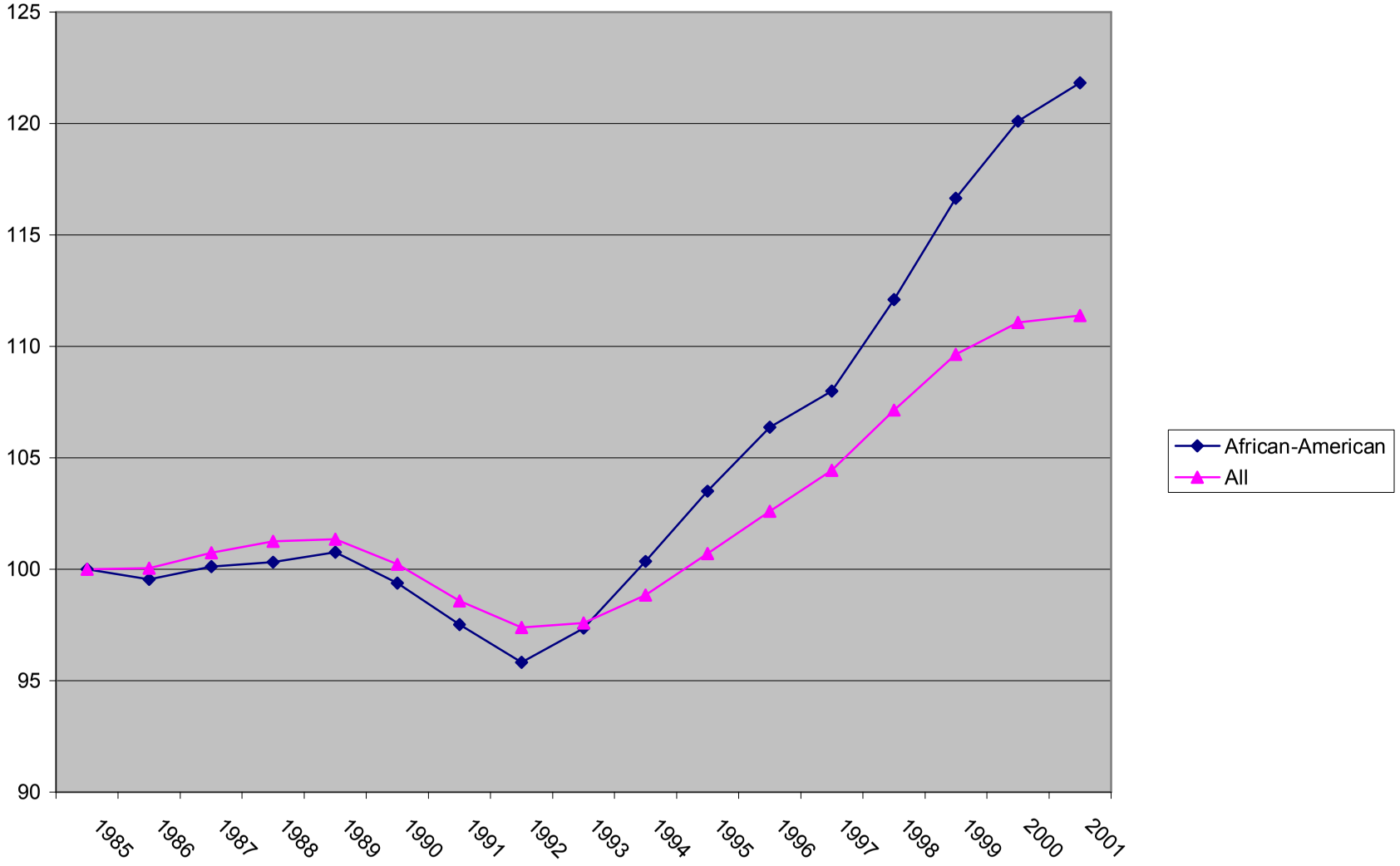

Figure 1. Trends in Material Well-being, 1985-2001: African-American Children and All Children

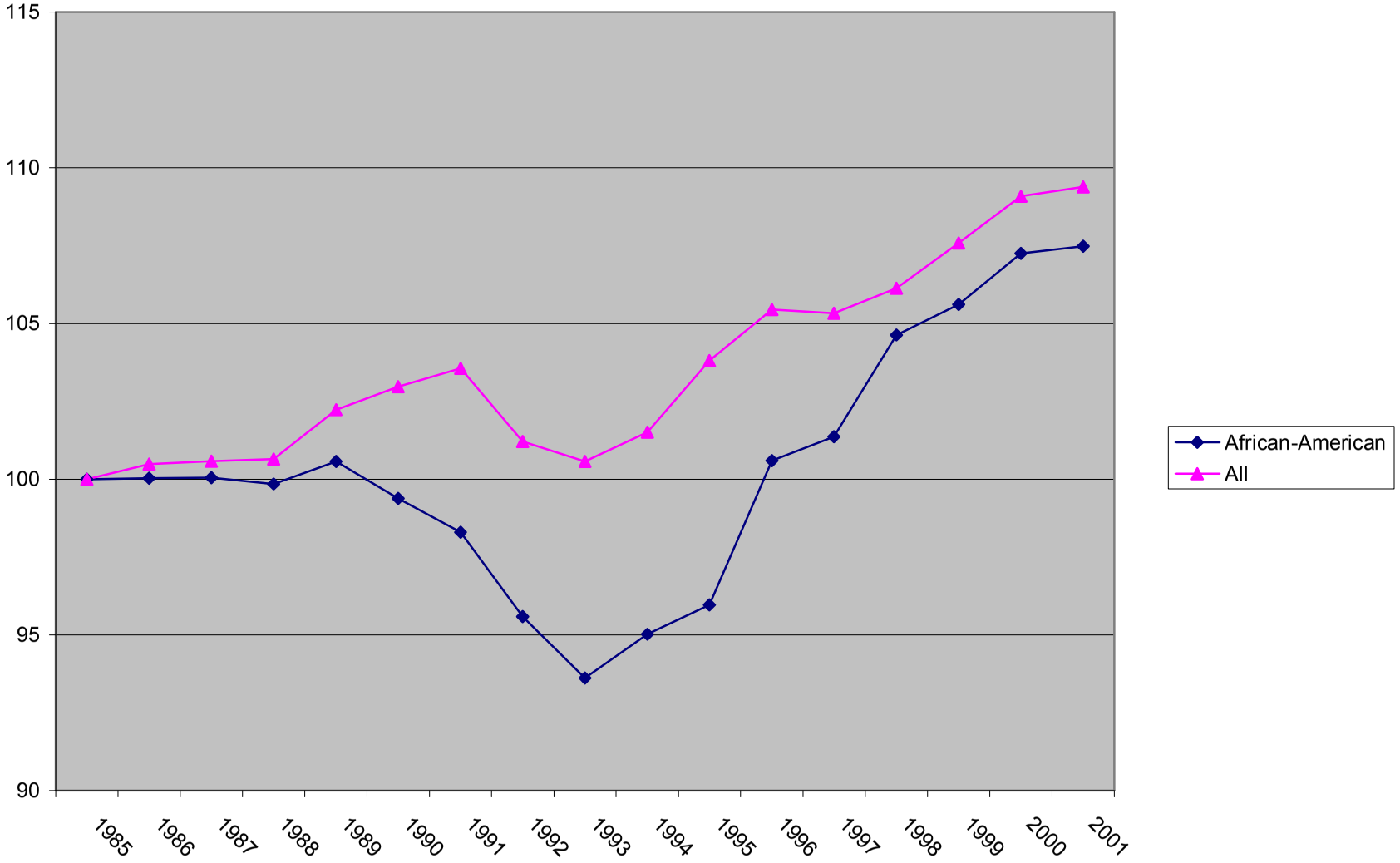

Figure 2. Trends in Health Domain, 1985-2001: African-American Children and All Children

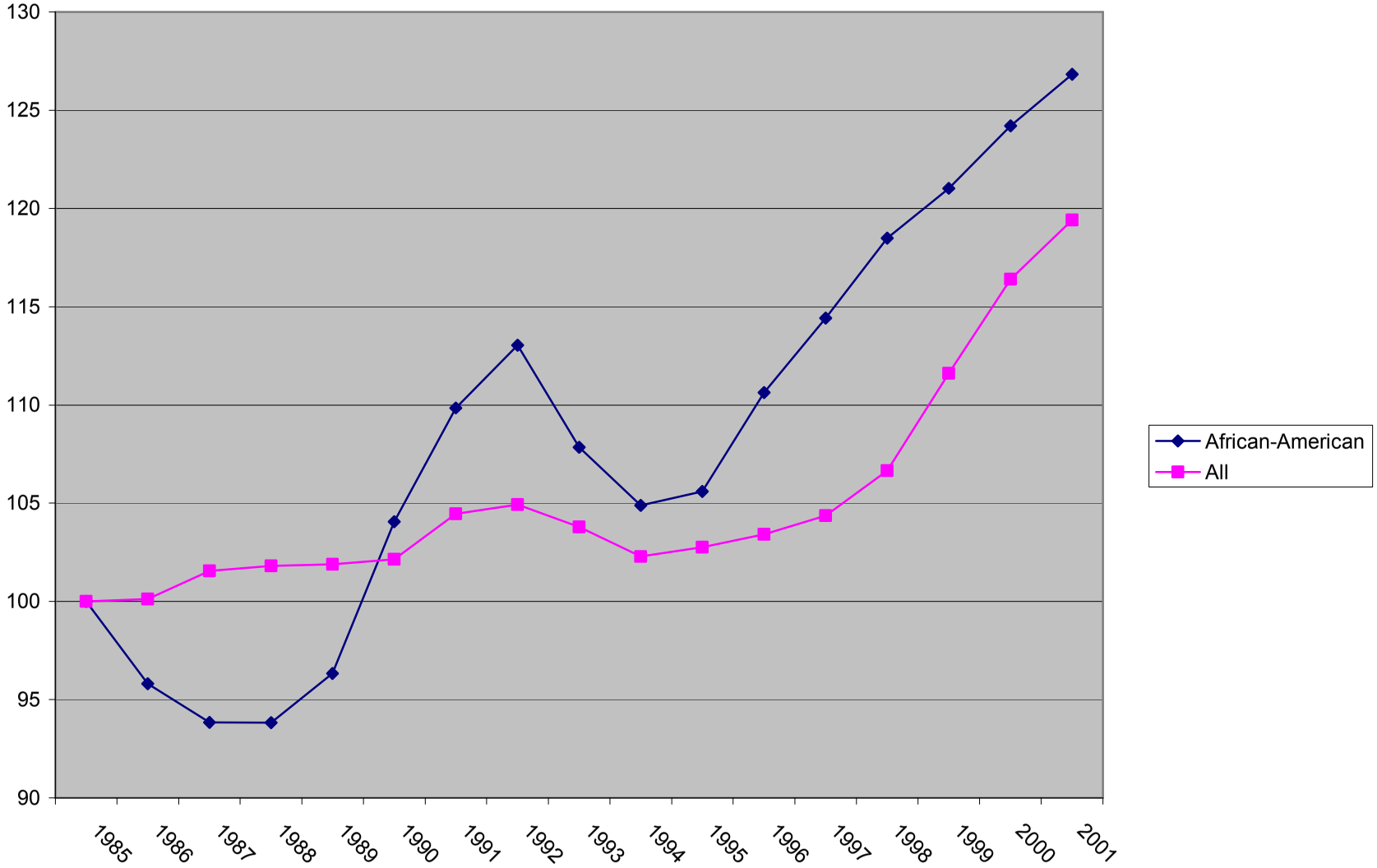

Figure 3. Trends in Safety/Behavioral Well-being, 1985-2001: African-American Children and All Children

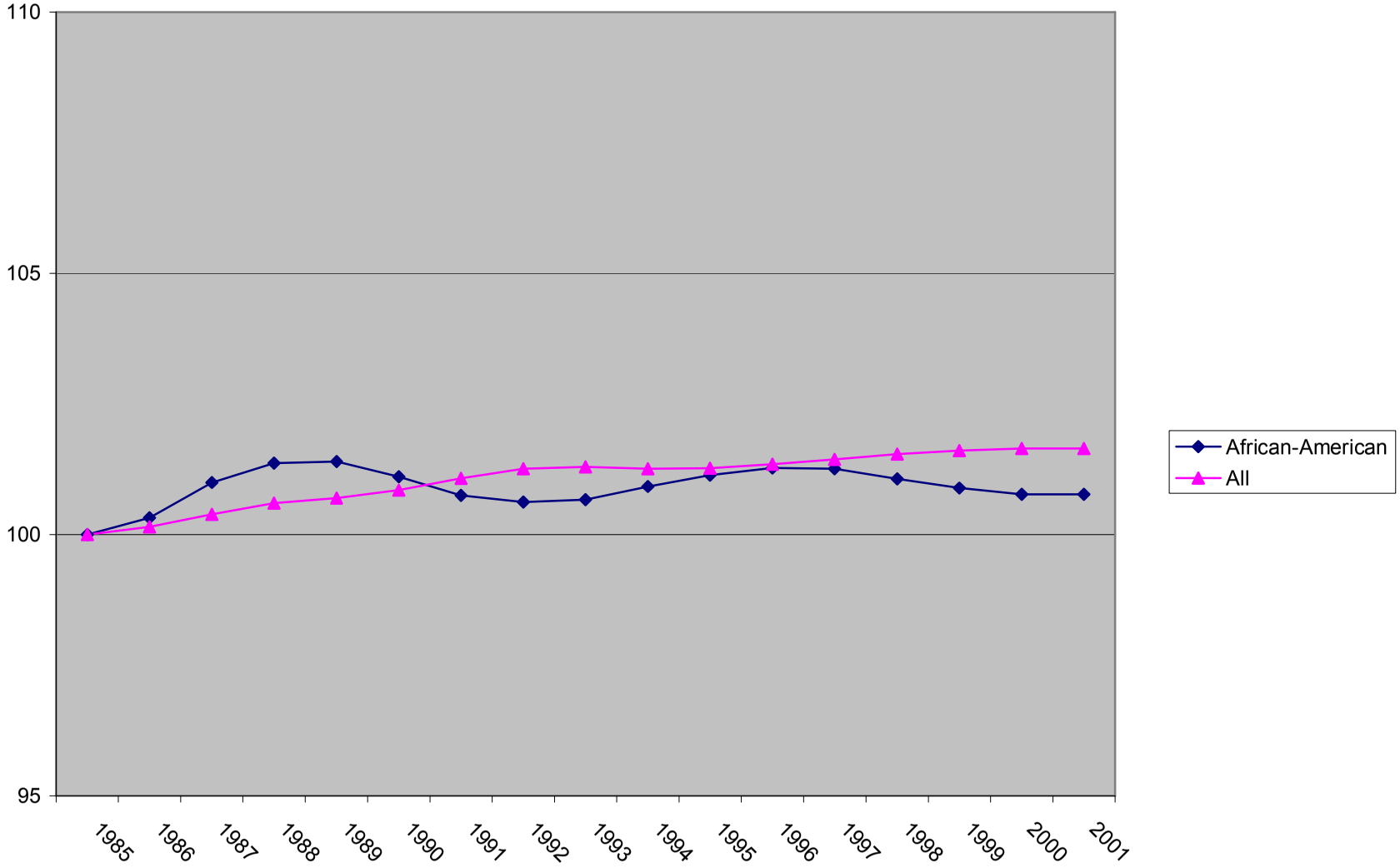

Figure 4. Trends in Educational Well-Being, 1985-2001: African-American Children and All Children

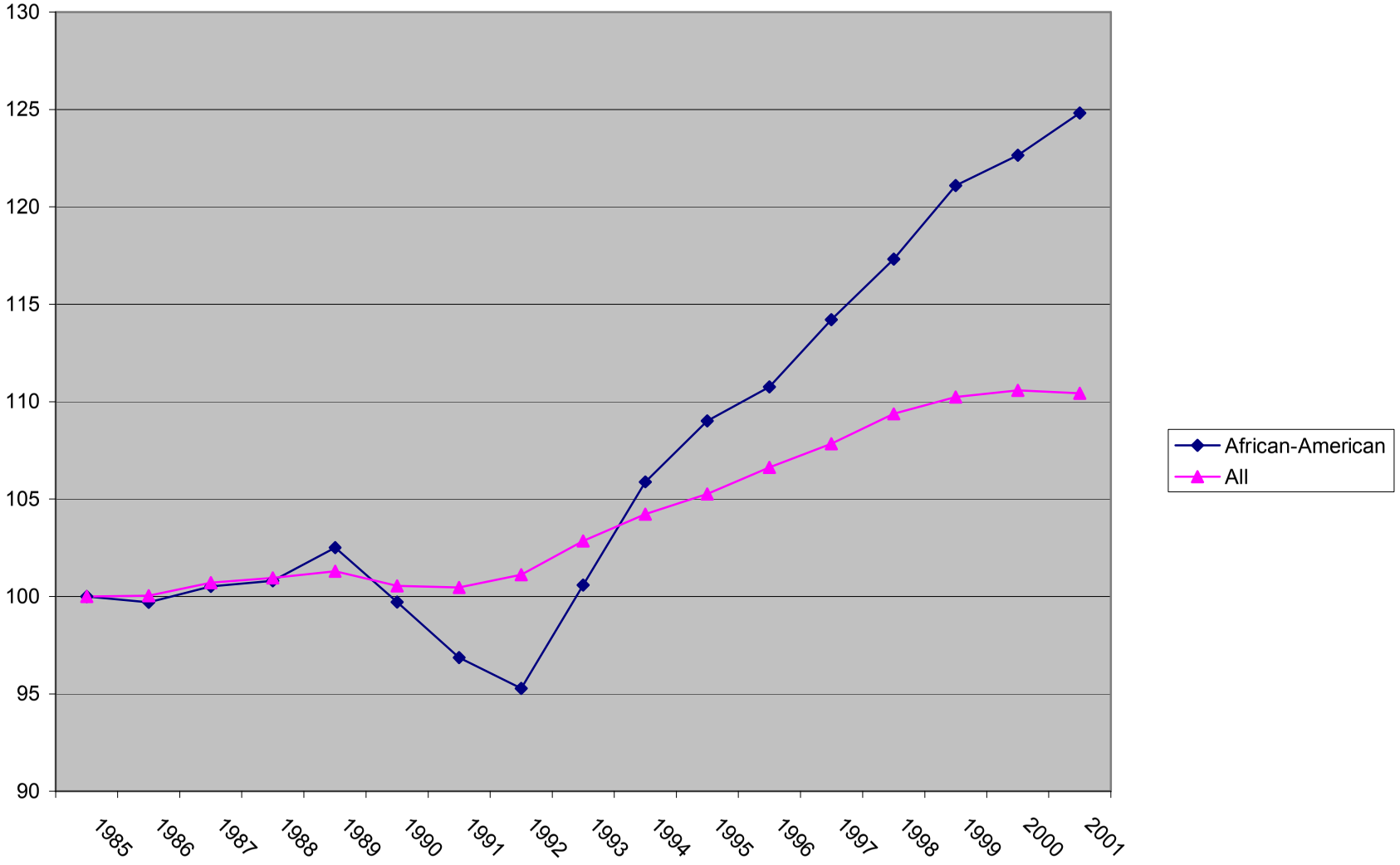

Figure 5. Trends in Place in Community Domain, 1985-2001: African-American Children and All Children

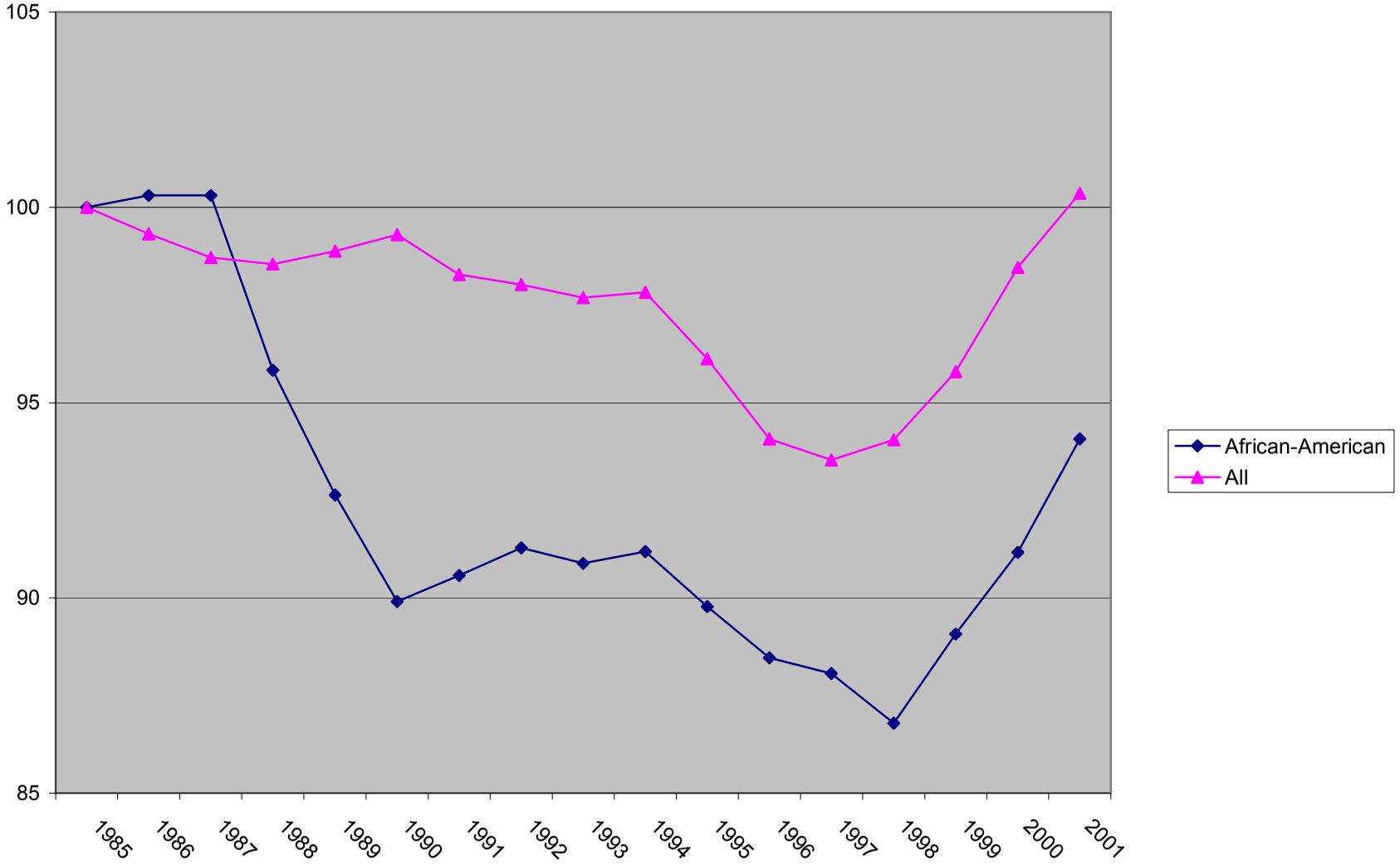

Figure 6. Trends in Social Relationship Domain, 1985-2001: African-American Children and All Children

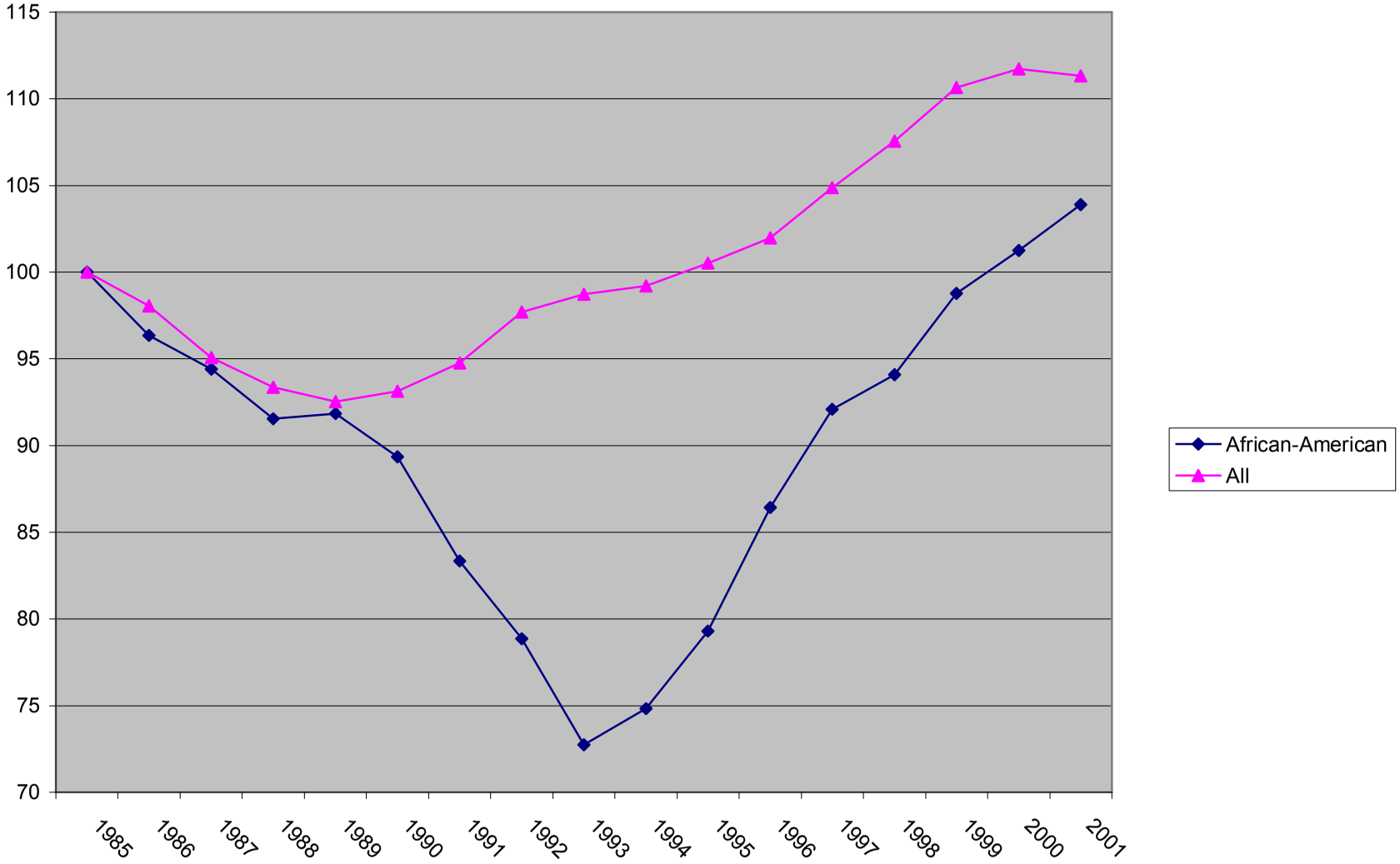

Figure 7. Trends in Emotional/Spiritual Well-being, 1985-2001: African-American Children and All Children

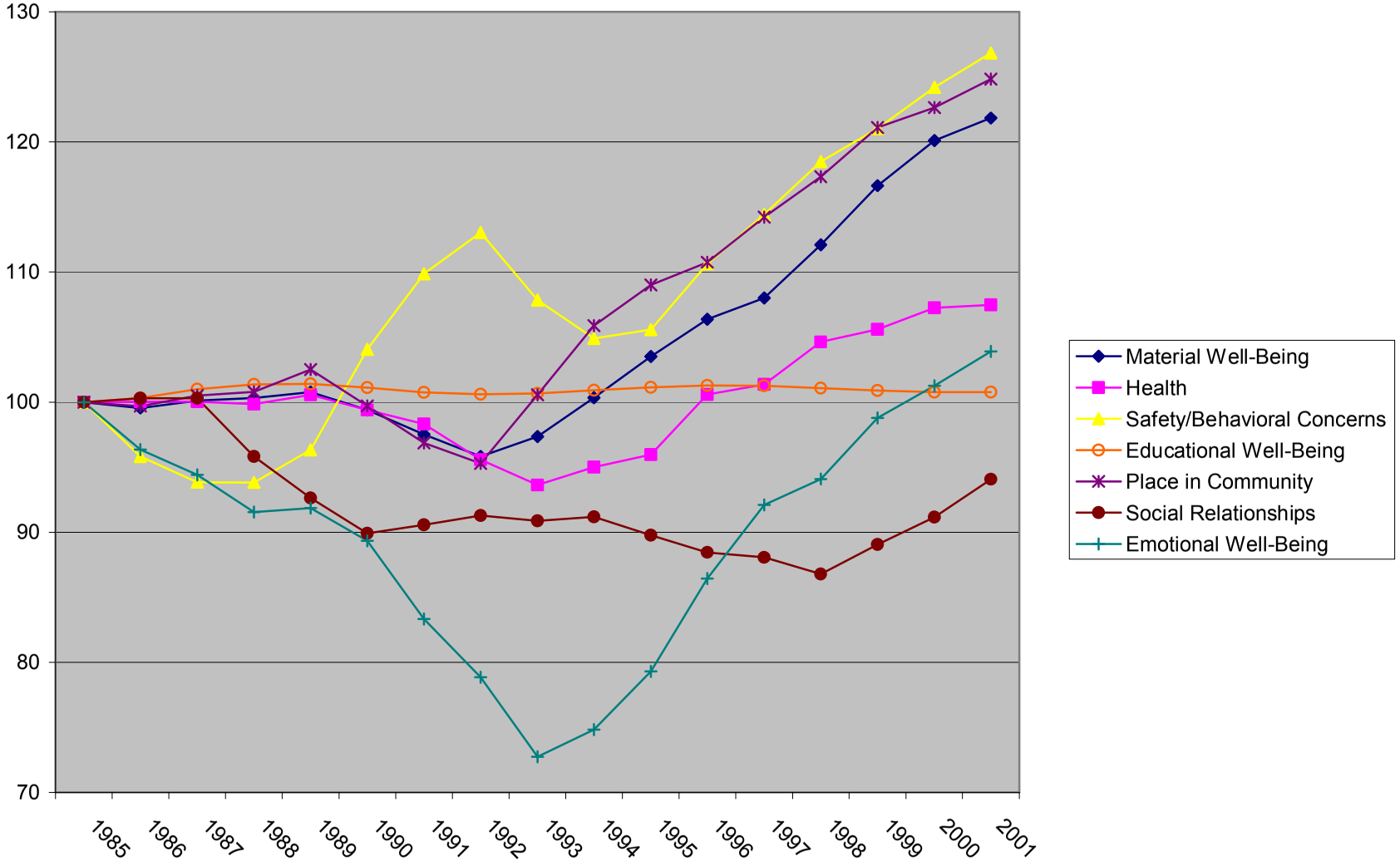

Figure 8. Domain-Specific Indices of Child Well-Being for African-American Children, 1985-2001

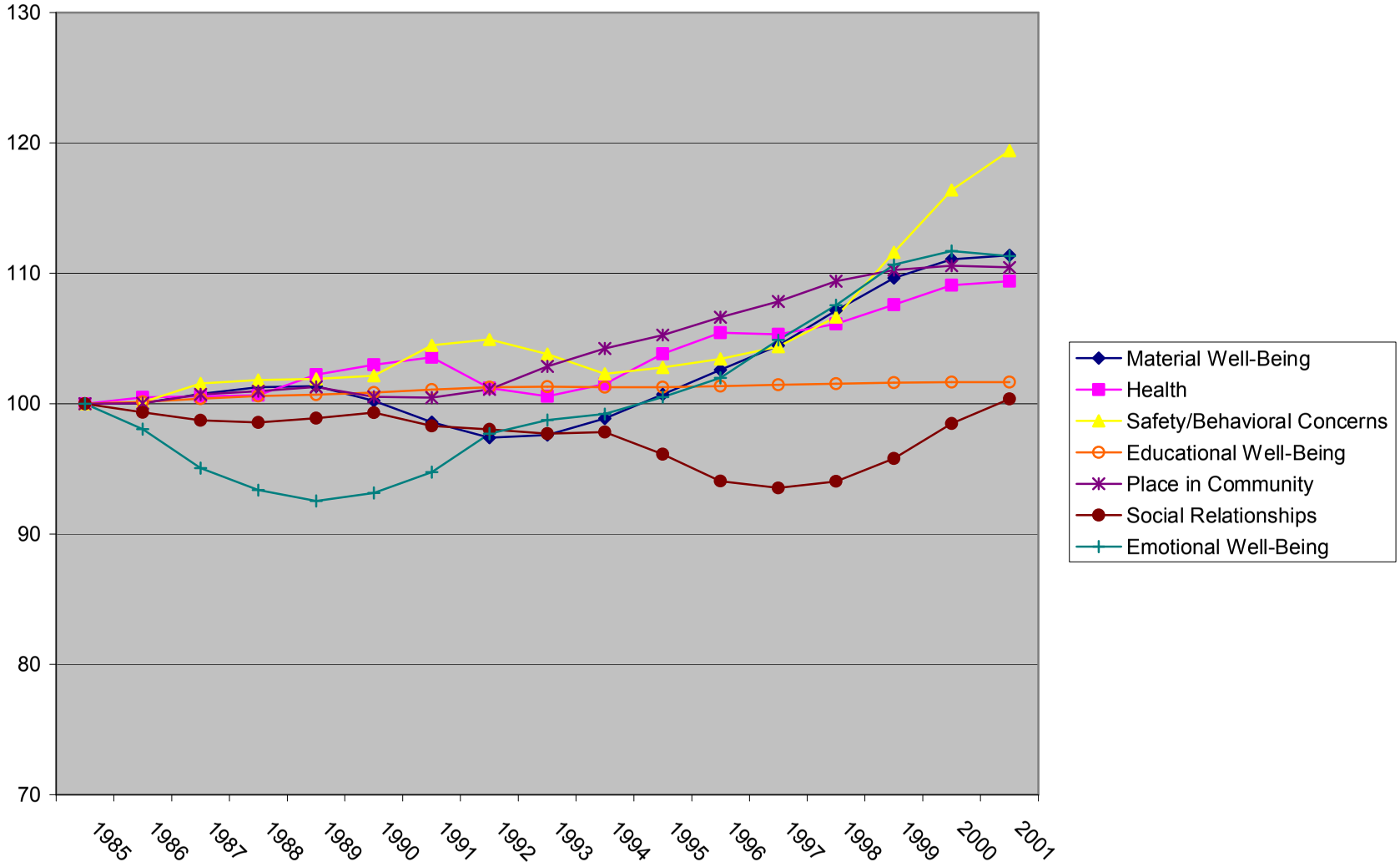

Figure 9. Domain-Specific Indices of Child Well-Being for All Children, 1985-2001

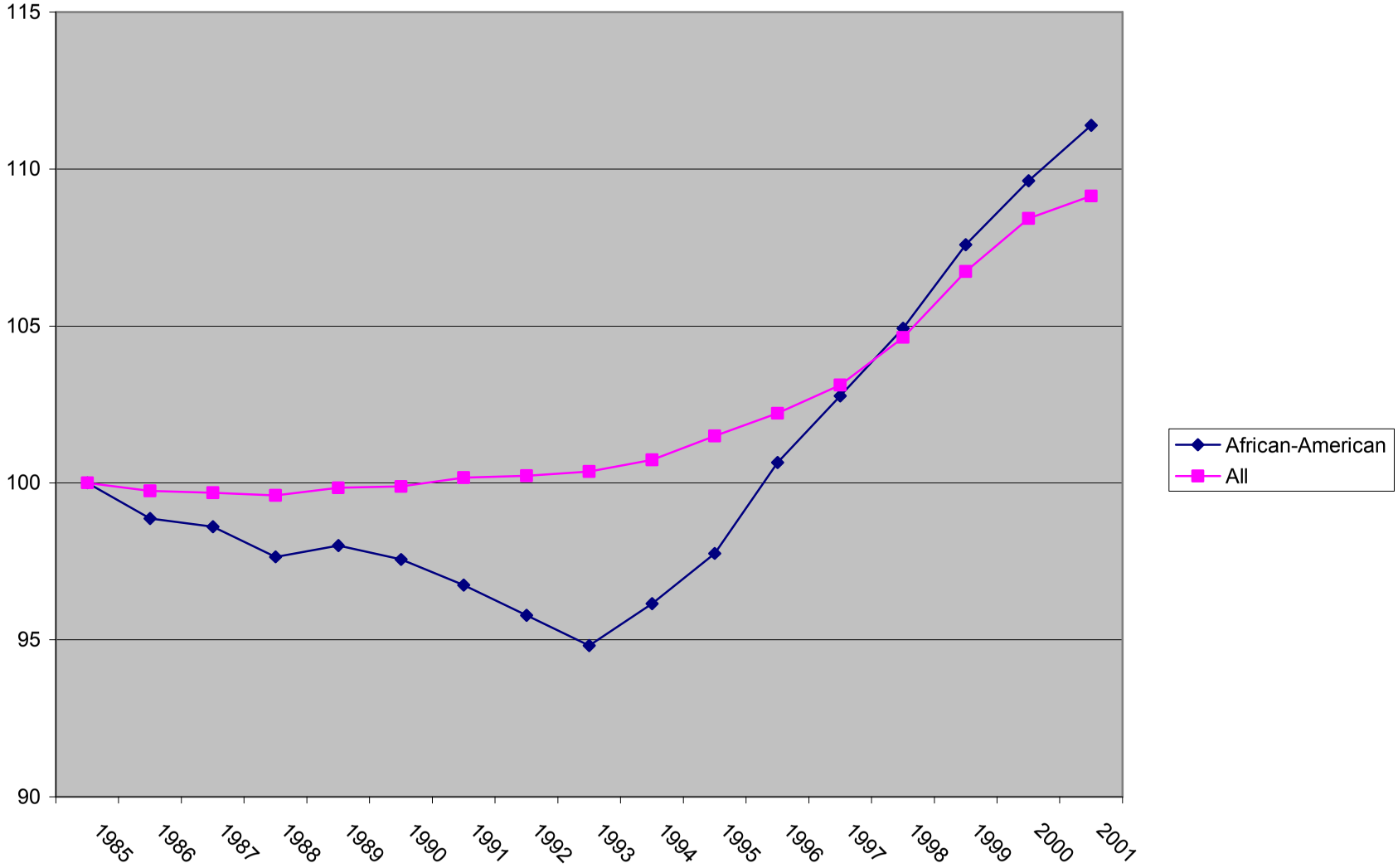

Figure 10. Summary Child Well-Being Index, 1985-2001: African-American Children and All Children