

# Impact of Parentification on Long-Term Outcomes Among Children of Parents With HIV/AIDS

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*Stein, Riedel, and Rotheram-Borus reported in 1999 that early parentification predicted maladaptive outcomes of more emotional distress, substance use, and conduct problems among adolescents of parents with HIV/AIDS (PWH) 6 months later. The current study assessed the adolescents (N = 213) 6 years later to assess whether there were continuing negative effects of parentification, or, rather, if there were some positive outcomes. Although the premature assumption of parental roles had negative effects in the short term, we hypothesized that such skills may have been adaptive in the long run, especially in the case of adolescents with major stressors in their lives, including dying or ill parents, impoverished environments, and family instability. We found that early parentification predicted better adaptive coping skills and less alcohol and tobacco use 6 years later. In addition, early parentification was not associated with later emotional distress and dysfunctional parenting attitudes, including expecting role reversals in their own children.*

*Keywords: Parentification; Parents With AIDS; Adaptive Coping; Parental Death*

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The process of parentification refers to the early and premature assumption of parental roles and adult responsibilities in children or adolescents before they are emotionally or developmentally prepared for such roles (Boszormenyi-Nagy & Spark, 1973; Jurkovic, 1997). The parent may be unable or unwilling to give the protection and guidance normally expected within our culture and simultaneously may have high expectations for the child to provide care and nurturance to him or her (Mayseless, Bartholomew, Henderson, & Trinke, 2004). The children may reverse roles by assuming a caretaker *parental* role, a *spousal* role in which he or she becomes a

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confidante of the parent, or an *adult* role with responsibilities within the household (Mika, Bergner, & Baum, 1987).

This phenomenon of role reversal is more likely to emerge among one-parent families, in conditions of stress and social isolation, among overtaxed parents, and when there is a chronically ill parent or a parent with alcohol and/or substance use disorders (Barnett & Parker, 1998; Carroll & Robinson, 2000; Chase, 1999; Mayseless et al., 2004). In addition, single mothers may rely on their children more than single fathers do (Jurkovic, Thirkield, & Morrell, 2001). All these conditions are highly prevalent among families with a parent with HIV/AIDS (PWH; Stein, Riedel, & Rotheram-Borus, 1999). Most PWH are single mothers living in impoverished neighborhoods with high rates of substance abuse and use (Rotheram-Borus et al., 2002). As with other families with chronically ill parents or bereaved children (Harris, 1991; Raphael, Cubis, Dunne, Lewin, & Kelley, 1990; West, Sandler, Pillow, Baca, & Gersten, 1991), adolescents of PWH often experience high levels of stress and are at risk for long-term negative developmental outcomes.

In prior research, Stein et al. (1999) studied parentification in a sample of adolescents of PWH. They found that early parentification predicted maladaptive outcomes of more emotional distress, substance use, and conduct problems 6 months later. In addition, girls were more likely to report adult role-taking than boys, who were more likely to assume a parental role. Given the maladaptive outcomes found for the adolescent children of PWH who had assumed parentified roles within the family, Stein et al. concluded that the pressures associated with parentification may have had dysfunctional effects on developmental opportunities for these youth, potentially leading to increased difficulties in adulthood. In support of this view, Hetherington (1999), in studying children of divorce, concluded that parentification led to adjustment difficulties in adulthood. Chase (1999) and, earlier, Boszormenyi-Nagy and Spark (1973), also highlighted the importance of meeting the child's developmental needs to mitigate the effects of parentification.

Despite the apparent risks of parentification, Stein et al. (1999) also questioned whether, for the adolescent children of PWH, parentification might also have some positive benefit for the youth; PWH genuinely needed care, and the adolescents may have needed to "grow up fast" given the likelihood of parental death. Furthermore, these adolescents may have been required to tend to younger siblings on a permanent basis (Riedel, 1998). Indeed, 12% of the PWH in the current sample formally designated a sibling as the caretaker for their younger children in their custody planning or wills (Rotheram-Borus, Lester, Wang, & Shen, 2004).

The current study revisits the adolescent study participants 6 years after their initial recruitment to gauge whether there are continuing negative effects of early parentification, or if there have been some beneficial effects due to their increased resilience and competency in the face of traumatic loss and stress. Masten (2001) noted that resilience is a common phenomenon that arises from the basic ability of humans to adapt and, indeed, that development is robust even in the face of adversity. Although the premature assumption of parental roles had varied negative effects in the short term, the unusual developmental demands of having a seriously ill or dying parent during adolescence raised questions about outcomes as they emerged into late adolescence or young adulthood. We hypothesized that early exposure to family responsibilities and acquisition of related coping skills may have been adaptive in the long run for these youngsters.

In addition, most PWH are ethnic minorities. For example, the current sample is over 50% Latino and over 33% African American. Latino and African American cultures are more family- and group-oriented than expected in White, non-Hispanic households. Behaviors that may be labeled "parentified" may be normative and culturally appropriate within their families and reflect interdependent and collectivistic cultural values rather than pathology (Anderson, 1999; Chamorro, 2004). Chamorro noted as an example that Latino children often function as translators and spokesmen for their Spanish-speaking parents, which causes them to serve in an adult role. This often leads to a positive sense of ethnic identity and greater self-esteem (Weisskirch, 2005). Anderson reported that there is no reference to parentification in the African American family literature. The values of African American families often stress interdependence and flexible family roles. If standards of the wider society were applied to these cultural values, they might be perceived as enmeshment, codependency, or lack of boundary definition (Godsall, Jurkovic, Emshoff, Anderson, & Stanwyck, 2004). It would certainly be understandable that a child within a family that stressed interdependency and communal values would take over roles normally performed by a parent who was severely ill.

The variables we selected as outcomes to examine included the adolescents' own parenting attitudes (particularly attitudes centered on the perceived role of children), their emotional distress, alcohol and tobacco use, and adaptive coping skills. Parenting attitudes were selected because there was a concern that youth who were parentified at their baseline assessment would, in turn, report maladaptive beliefs about parenting. In particular, they might expect role reversals in their own children and have unrealistic expectations about the support that they should receive from their children. This expectation could have followed from their own parentified behaviors and beliefs and those of their parents, and have continued through intergenerational transmission or other learned developmental mechanisms (Barnett & Parker, 1998; Kretchmar & Jacobvitz, 2002).

In Stein et al. (1999), internalized emotional distress was associated with the adult role-taking aspect of parentification, even after accounting for the gender difference in distress. The girls had reported more depressive affect and more adult role-taking. Several studies have also identified associations among parentification, depression, and anxiety (Castro, Jones, & Mirsalimi, 2004; Mayseless et al., 2004). We were interested in assessing whether earlier parentified behaviors had a negative impact on youth emotional distress 6 years later.

Substance use was also a concern. Most of the adolescents' parents (84%) had been drug users, injectors, or partners of injecting drug users prior to being diagnosed with HIV. The children were often aware of the substance use of their parents, and their neighborhoods were characterized by high rates of drug dealing and availability of drugs. Because of the substance use histories in these families, we anticipated that substance use would be prevalent among the adolescents as well (Huang, Carbone, & Gfroerer, 1998). We also hypothesized that early parentification may have led them to more substance abuse due to their assumption of pseudomature, adultlike behaviors at a young age.

Coping skills were also assessed. Coping strategies are defined as the cognitive and behavioral efforts to manage internal or external demands seen as taxing or exceeding one's resources (Lazarus & Folkman, 1984). Parentified children often struggle with feelings of inadequacy and incompetence (Castro et al., 2004). We were concerned about the long-term ability of the youngsters to cope in the face of parentification and

undue pressures when they were not developmentally ready for such pressures. On the other hand, early responsibilities and mastery of difficult situations may have led to enhanced coping skills.

In our model, we included gender, age, and intervention status. We had previously found that female gender was associated with greater emotional distress at baseline and that greater age was associated with more premature adultlike behaviors such as substance use and sexual behaviors (Rotheram-Borus, Stein, & Lin, 2001; Stein et al., 1999). In addition, a family-based intervention had been implemented among a random sample of the study youth and their PWH to address varied important issues of particular relevance to them (Rotheram-Borus, Lee, Gwadz, & Draimin, 2001; Rotheram-Borus, Lee, et al., 2004).

We include whether the parent had died by the time of the 3-year assessment and also include the gender of the parent with HIV/AIDS. Maternal illness may have been more traumatic for the youth. Although some have found that emotional distress increases with parental death (e.g., West et al., 1991), we had not found this association to be long-lasting in prior research with this current sample over 6 years of follow-up (Rotheram-Borus, Weiss, Alber, & Lester, 2005). We have found that youth demonstrated their highest levels of distress prior to parental death rather than after. Rotheram-Borus, Stein, et al. (2001) found some shorter term effects of parental death 2 years after the start of the study. These included more emotional distress and problem behaviors. Thus, results have been mixed and inconclusive.

## METHOD

### Participants

From a comprehensive log at the New York City Division of AIDS Services (DAS) from August 1993 to March 1995, parents with HIV/AIDS were approached by their DAS case managers and referred to the research project if they had at least one adolescent child (biological or adopted) between the ages of 11 and 18 who typically lived with the parent. DAS case managers judged that the research project might not be beneficial to 35 potential participants and did not approach these parents. These particular PWH had serious functional problems, such as a psychotic disorder, that might have prohibited engagement in the project. It was also considered by the case managers that participation by these individuals would add to their stress levels. Of the 429 eligible parents, 307 were recruited: 65 (15.2%) were untraceable; 46 (10.7%) refused to participate; and 11 (2.6%) were severely ill or incarcerated and were not recruited. Thus, 71.6% ( $n = 307/429$ ) of PWH were recruited, reflecting 84% ( $n = 307/364$ ) of the traceable PWH.

Informed consent and permission to recruit adolescents were obtained from the parents and then from the adolescents. Only 280 of 307 parents agreed to allow their children to participate with them; the remaining 27 parents agreed to participate alone. Fourteen parents allowed their children to enroll but did not participate themselves. From 307 PWH, 413 adolescents were eligible for participation in this study (average  $n$  per family = 1.5,  $SD = 0.7$ , range 1–5). Families (PWH and all their adolescent children) were randomly assigned by computer to a coping skills intervention condition ( $n = 153$  PWH,  $n = 206$  adolescents) or the standard care condition ( $n = 154$  PWH,  $n = 207$  adolescents) at the completion of the baseline interview. Annual reevaluation rates were high (ranging from 82% to 94%) and were similar in the intervention and control groups. Ninety percent ( $n = 288$ ) of youth eligible for the

analysis participated in the baseline and 6-year follow-up points. About 75% of the youth had been administered the Parentification Scale (Mika et al., 1987) at baseline; only these youth were used in the current analysis, leaving a total of 213. Attrition analyses reported in Stein et al. (1999) indicated that the omission of adolescents because of data availability did not bias the sample. The average age of the 213 adolescents at the time of the first assessment was 14.9 years; they ranged in age from 11 to 19 years. The adolescent sample was about 56% female. The sample was 53% Latino, 36% African American, 2% White, and less than 1% Asian. Forty percent of these youth had lost a parent by the time of the 3-year assessment, and 44% had participated in the intervention program.

## **Procedures**

The adolescents were interviewed apart from their parents in their homes by predominantly African American or Latino (66%) interviewers who had master's degrees and/or were graduate students. All interviewers received 40 hours of training that covered interviewing, ethics, confidentiality, child abuse, emergency crisis protocols, HIV and AIDS, and conducting in-home assessments with computerized interviews. Each interview lasted from 1.5 to 3 hours and covered a broad range of areas concerning each person's behavioral, social, physical, and mental health status. Informed consent forms were signed by parents and the adolescents prior to the interview. Youth received a \$25 incentive for each interview.

## **Intervention**

Although the primary purpose of the current study is not an investigation of the impact of the intervention, we include their intervention group membership in this analysis. Participation in the intervention as opposed to the standard care group could have influenced various outcome behaviors and thus needs to be included as an important control. Furthermore, finding that the intervention had an impact on the behaviors under investigation would have worthwhile implications for the efficacy of the intervention and indicate ancillary beneficial effects of the intervention that could warrant further study.

The intervention was delivered in three modules related to the phase of parental illness and the anticipated course of disease. The intervention focused on five components in each of the topic-linked areas: framing the impact of parental HIV; providing information on adaptive responses to predictable challenges (e.g., disclosure); building affective, behavioral, and cognitive social skills; building social support for well-being; and reducing risk acts. Module 1 addressed parents' skills in coping with negative emotions related to their serostatus, making decisions about disclosure of serostatus to children, and reducing their own substance use and transmission acts. Module 2 included both parents and adolescents (if the parent had disclosed his or her serostatus) and encouraged parents to make custody plans and to help their children adjust to their parent's HIV status. For adolescents, Module 2 was designed to decrease youth's problem behaviors, emotional distress, and teenage pregnancy. Finally, a third module was offered if the parent died. Their adolescent children and guardian were offered a third intervention module to set new life goals and to improve their guardian-youth relationship. The intervention was based on a cognitive-behavioral skills training model and was delivered in small facilitated groups.

## Measures

### *Baseline Measured and Latent Variables*

*Parentification indicators.* We grouped items from the Parentification Scale into the three preexisting subscales most applicable to the participants (Mika et al., 1987). The fourth subscale involved taking a parental role with siblings but was not used because many participants did not have siblings; thus, many of the values were missing for those items and were not pertinent. (Preliminary analyses conducted for Stein et al., 1999, indicated that the number of siblings or being an only child was not significantly associated with the adolescent's degree of parentification.) We used the mean of the items within each subscale as measured indicators of a parentification latent variable. The three subscales were as follows: (1) *Nonspecific adult role taking* included performing various household chores, such as doing laundry and making dinner. (2) *Spousal role vis-à-vis parent* included items regarding the parent sharing intimate secrets, the parent discussing financial issues, and the parent sharing personal problems as if the youth were another adult. (3) *Parental role vis-à-vis parent* included items such as the parent letting the youth have a lot of influence when making important decisions, and parents seeking advice on adult matters.

*Demographic and dichotomous variables.* We included age in years, and gender of the parent and the child. Gender was coded 1 for males and 2 for females. Two other dichotomous variables were used as predictors: parental death by the time of the 3-year assessment (40% of parents had died; 1 = no, 2 = yes) and intervention group membership (0 = control group, 56%, 1 = intervention group, 44%). These variables were not significantly correlated among themselves. We also tested the impact of ethnicity on degree of parentification by initially including African American (yes/no) and Latino (yes/no). However, neither variable was significantly associated with parentification, so those indicators were dropped from the model. As discussed in the introduction, it was possible that children from certain ethnic groups were more likely to display parentified behaviors because of their inculcated cultural values of interdependence and collectivism (Anderson, 1999).

*Emotional distress.* The Brief Symptom Inventory (BSI; Derogatis, 1975, 1992) was administered at each assessment wave. Mean scores from each of three subscales—depression, anxiety, and phobic anxiety—were used as indicators of emotional distress at all three time periods, with ratings ranging from 0 to 4. Youth were asked whether the problem had bothered them during the past week, including today. This construct was used at baseline and at year 6.

*Alcohol and tobacco use.* We assessed (1) the number of cigarettes smoked per day over the past 3 months; (2) total frequency of drinks of any form of alcohol (beer, wine, liquor) over the past 3 months; and (3) quantity of alcohol use indicated by the number of drinks of beer, wine, or liquor they had in a day on the days that they drank over the past 3 months. These were assessed at both time periods. There was very little hard-drug use reported.

### *Six-Year Latent Variables*

*Positive parenting attitudes.* Positive parenting attitudes were assessed with the Adult-Adolescent Parenting Inventory (AAPAI-2; Bavolek & Keene, 2001). The inventory assesses high-risk parenting attitudes and behaviors. Thirty-two items from four

subscales were used: (1) reversing parent-child role responsibilities; (2) strong belief in the use of corporal punishment; (3) inappropriate expectations of children; and (4) lack of empathy toward children's needs. Scores range from 1 (*strongly agree*) to 5 (*strongly disagree*). The means of items from each subscale were used as indicators of a latent variable representing parenting attitudes. These were scored with higher numbers indicating more positive behaviors and attitudes. This scale has been shown to be valid and reliable, and appropriate for adult parents and preparent populations (Bavolek & Keene).

*Adaptive coping skills.* Adaptive coping skills were indicated by the means of three prosocial coping-style subscales derived from a coping inventory, the Dealing With Illness Questionnaire (Murphy, Rotheram-Borus, & Marelich, 2003). A Likert-style 5-point response scale ranged from 1 (*never*) to 5 (*always*). The measures were adapted from the Coping With AIDS scale (Namir, Wolcott, Fawzy, & Alumbagh, 1987) and have undergone confirmatory factor analyses among two HIV-infected cohorts (Murphy et al.). The three subscales were (1) positive action (sample item: began solving problems you had avoided before), (2) spiritual hope (sample item: trusted your belief in God), and (3) seeking social support (sample item: talked to others with problems like yours). The self-destructive escape subscale, which indicates nonadaptive, anti-social coping, was not used to avoid a conceptual overlap with the alcohol and tobacco use latent variables.

Emotional distress and alcohol and tobacco use were assessed as described above at baseline.

## Analyses

The EQS structural equation modeling (SEM) program was used to test the hypothesized model (Bentler, 2006). The closeness of the hypothetical model to the empirical data was evaluated statistically through various goodness-of-fit indices. The maximum likelihood  $\chi^2$ , the Comparative Fit Index (CFI), the adjusted Satorra-Bentler robust  $\chi^2$  (S-B  $\chi^2$ ), the Robust CFI (RCFI), and the root mean square errors of approximation (RMSEAs) were used to indicate fit. Robust statistics were also used because the data were multivariately kurtose. Values approaching .95 or greater are desirable for the CFI and the RCFI (Bentler). The RMSEA indicates lack of fit per degrees of freedom, controlling for sample size, and values less than .06 indicate a close fitting model. Confidence intervals for the RMSEAs are also reported.

## Models

*Preliminary confirmatory factor analyses.* An initial confirmatory factor analysis (CFA) was performed with each hypothesized latent construct predicting its proposed manifest indicators. All latent constructs and single-item variables were correlated without any presumption of temporal ordering. However, the covariances among age, gender, intervention group membership, and parental death variables were not included in the CFA because preliminary analyses indicated that none was correlated significantly or even approached significance. All possible covariances between the latent variables and the measured variables were included, although we did not expect that parental death and intervention group membership would correlate significantly with the baseline measures. This preliminary analysis assessed the adequacy of the proposed factor structure (measurement model) and the relationships among the

latent and single-item variables. The only a priori correlated error residuals allowed in the CFA were those between measured variables assessed the same way at each wave (e.g., anxiety at baseline, anxiety at 6 years). If the a priori associations were not statistically significant, they were dropped from the CFA model. We used a few suggestions from the Lagrange Multiplier (LM) test (Chou & Bentler, 1990) to add significant associations provided they made sense theoretically and reflected results found in prior work. For instance, based on our prior study, we anticipated that one of the measured indicators of parentification, adult role-taking, would be associated with female gender.

*Path model.* Once the factor structure was confirmed, a longitudinal predictive model was tested in which the baseline variables of age and gender, gender of parent, emotional distress, parentification, and alcohol and tobacco use predicted the 6-year outcome variables of positive parenting attitudes, adaptive coping skills, emotional distress, and alcohol and tobacco use. Parent death by 3 years and intervention group membership were also included as predictors. Significant stability paths between emotional distress at baseline and emotional distress at 6 years, and between tobacco and alcohol use at baseline and at 6 years were expected.

The association between early parentification and not only the entire latent construct of positive parenting attitudes but also the individual measured item from that scale that focuses on reversing parent-child role responsibilities was examined. Early parentified behaviors could have conditioned the participants to expect or presume that the same behaviors that they had exhibited when they were younger would be normative for children of their own. The LM test assessed the possible statistical significance of a nonstandard path from the latent variable of parentification to that particular item.

## RESULTS

### Confirmatory Factor Analysis

Table 1 reports summary statistics of the measured variables and the factor loadings of the hypothesized factor structure. All factor loadings were significant ( $p \leq .001$ ). Fit indices for the CFA model were all acceptable: ML  $\chi^2 = 347.48$ , 271 *df*, ( $p \leq .001$ ); CFI = .96, RMSEA = .036, 90% confidence interval (CI) = .024 to .047; S-B  $\chi^2 = 335.32$ , 271 *df*, ( $p \leq .005$ ); RCFI = .95; RMSEA = .033, CI = .019 to .045.

Based on suggestions from the LM test, an additional pathway was allowed between female gender and the measured variable from the parentification latent variable, taking an adult role; between male gender and the positive action variable from the adaptive coping skills latent variable; and between female gender and not expecting role reversals from the positive parenting attitudes latent variable. These additions appeared to be reasonable. Covariances between four of the across-time-measured variables were not significant and were dropped from the final CFA model. These included depression, phobic anxiety, and both alcohol measures. Anxiety and cigarette use showed significant stability over time.

Table 2 reports the bivariate correlations among the constructs of the model. Focusing on correlates of baseline parentification, it is notable that it is correlated positively with more alcohol and tobacco use at baseline (.21;  $p \leq .01$ ) and negatively with alcohol and tobacco use at follow-up ( $-.15$ ;  $p \leq .05$ ). In addition, it correlated significantly with adaptive coping skills at follow-up (.24;  $p \leq .01$ ). Other noteworthy



TABLE 1  
*Means, Standard Deviations, and Factor Loadings in the Confirmatory Factor Analysis*

<b>Baseline</b>	<b>Mean (SD)</b>	<b>Factor Loading*</b>
Gender (1 = male, 2 = female)	1.56 (.50)	NA**
Parent gender (1 = male, 2 = female)	1.78 (.41)	NA
Age (years)	14.86 (2.00)	NA
Emotional Distress		
Depression	0.63 (0.73)	.82
Anxiety	0.53 (0.67)	.90
Phobic anxiety	0.50 (0.71)	.78
Parentification		
Spouse role	2.45 (0.92)	.68
Parental role	2.58 (0.84)	.75
Adult role	2.91 (0.99)	.47
Alcohol Tobacco Use		
Cigarettes/day	0.69 (1.20)	.52
Frequency of alcohol	1.57 (7.10)	.73
Quantity of alcohol	0.64 (1.60)	.88
Follow-up		
Positive Parenting Attitudes***		
Role reversing	3.26 (0.89)	.75
Corporal punishment	3.41 (0.66)	.52
Inappropriate expectations	4.09 (0.49)	.61
Lack of empathy	3.38 (0.68)	.80
Adaptive Coping Skills		
Positive action	2.58 (0.86)	.84
Spiritual hope	2.46 (0.92)	.68
Social support	1.73 (0.58)	.65
Emotional Distress		
Depression	0.44 (0.58)	.89
Anxiety	0.35 (0.54)	.95
Phobic anxiety	0.24 (0.47)	.83
Alcohol and Tobacco Use		
Cigarettes/day	1.22 (1.45)	.44
Frequency of alcohol	5.48 (16.16)	.41
Quantity of alcohol	1.61 (2.18)	.70
Intervention (0 = control, 1 = participant)	0.44 (0.50)	NA
Parent died by 3 years	1.40 (0.50)	NA

1 = no, 2 = yes.

\*All factor loadings significant,  $p \leq .001$ .

\*\*NA = Not applicable.

\*\*\*Higher scores indicate more positive attitudes.

correlations include the association between emotional distress at the two time points (.49;  $p \leq .001$ ) and a counterintuitive association between adaptive coping skills and more emotional distress (.19;  $p \leq .05$ ). Examination of the associations among the individual items that comprised the measured variables of this construct indicated that seeking social support from counselors or other mental health professionals was particularly associated with more emotional distress. These substantial associations appear to account for this unexpected relationship because increased distress may demand greater coping efforts.

TABLE 2  
Correlations Among Variables in Confirmatory Factor Analysis

	1	2	3	4	5	6	7	8	9	10	11
<b>Baseline</b>											
1. Parent gender (1 = male, 2 = female)	—										
2. Child gender (1 = male, 2 = female)	NA	—									
3. Age	NA	NA	—								
4. Emotional distress	.13*	.25***	-.01	—							
5. Parentification	.04	-.14	.06	.08	—						
6. Alcohol and tobacco use	.08	-.05	.28***	-.02	.21**	—					
<b>6-Year Follow-up</b>											
7. Positive parenting attitudes	-.25***	.34***	.25***	-.12	-.02	-.01	—				
8. Adaptive coping skills	.16*	.10	.08	.09	.24**	-.01	.05	—			
9. Emotional distress	.12*	.12*	-.08	.49***	.01	-.04	-.11	.19*	—		
10. Alcohol and tobacco use	.05	-.13	.18*	.10	-.15*	.16*	-.05	.18	.15	—	
11. Intervention	NA	NA	NA	-.01	.09	.09	.16*	.03	.09	.05	—
12. Parent died by 3 years	NA	NA	NA	.08	.02	.04	-.06	-.01	-.02	-.11	NA

NA = Not applicable. Preliminary analyses indicated no associations among these variables. \* $p \leq .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

**Path Analysis**

In the path model, the baseline demographics and psychosocial constructs, as well as intervention status and parental death, were positioned as predictors of the 6-year outcomes. The final predictive structural equation model is presented in Figure 1 after model trimming and addition of one significant predictor of 6-year depression: parent death by 3 years. This relationship was suggested by the LM test. Fit indices were very good: ML  $\chi^2 = 354.99$ , 304 *df*, ( $p \leq .02$ ); CFI = .97, RMSEA = .028, CI = .011 to .040; S-B  $\chi^2 = 342.90$ , 304 *df*, ( $p \leq .06$ ); RCFI = .97; RMSEA = .025, CI = .001 to .037.

Focusing on parentification, at baseline, it was significantly correlated with more alcohol and tobacco use. However, 6 years later, it was the most powerful predictor of less alcohol and tobacco use. In addition, it was a positive predictor of more adaptive coping skills. Early parentification did not predict poorer parenting attitudes and also did not predict more emotional distress. In the specific examination of the possible association between parentification and expecting role reversals from children, we found no significant association between these variables.

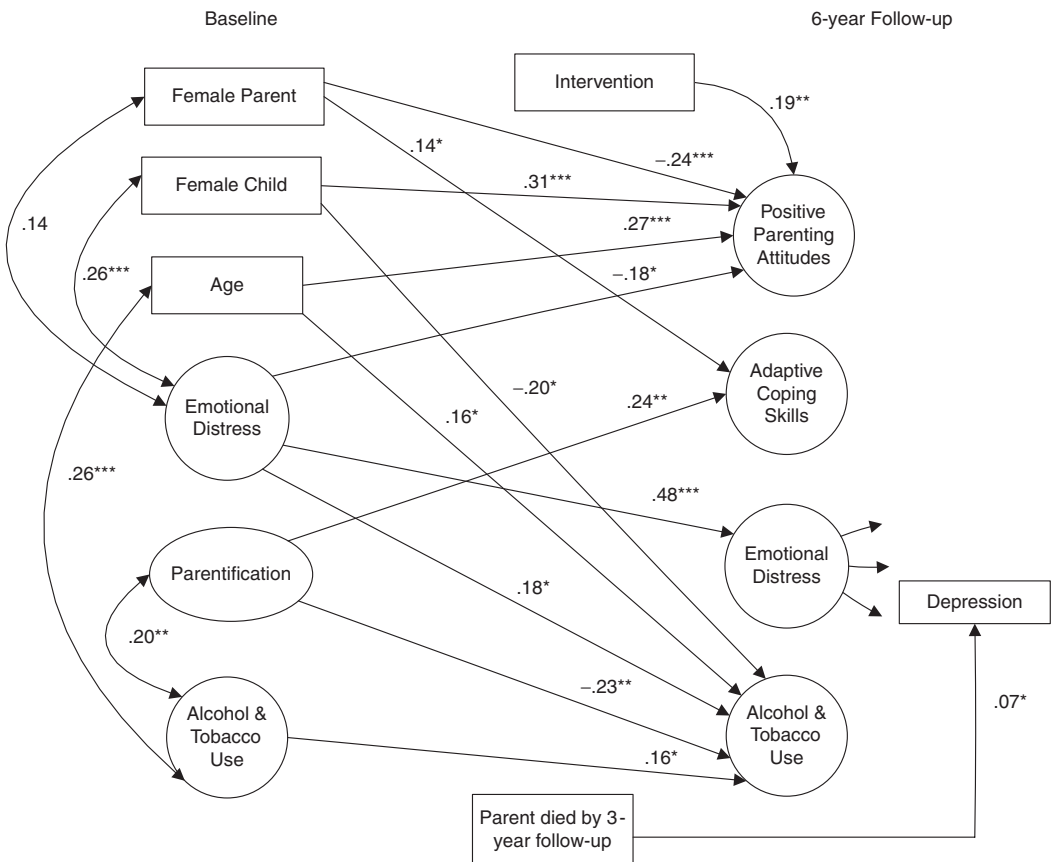


FIGURE 1 Significant Regression Paths among Latent and Measured Variables in the Structural Equation Model Assessing Outcomes of Youth Parentification. Regression Coefficients (Represented as One-Way Arrows) and Correlations Among the Predictors (Represented by Double-Headed Arrows) are Standardized (\*= $p \leq .05$ , \*\*= $p \leq .01$ , \*\*\*= $p \leq .001$ .)

We found significant stability over time for both alcohol and tobacco use and also for emotional distress. Alcohol and tobacco use was also predicted by male gender, greater age, more emotional distress, and less parentification. In the prediction of adaptive coping skills, only parentification was a significant predictor of the entire latent variable, although the positive association between males and positive action in particular was maintained.

The females and older participants reported more positive parenting attitudes. Those who had more emotional distress at baseline reported poorer parenting attitudes. Participation in the intervention program rather than the standard care program also had significant positive effects on positive parenting attitudes. In general, parental death by 3 years did not significantly impact the latent variables in the model. However, we found a specific effect on depression at 6 years among those whose parent had died within the first 3 years of the study.

## DISCUSSION

### Findings Related to Parentification

The main research question in the current study was whether early parentification was a precursor of later dysfunctional attitudes and behaviors among children of parents with HIV/AIDS. There was concern that their often obligatory assumption of adult, spousal, or parental roles in the face of the parental HIV illness would lead to more maladaptive parenting attitudes, emotional problems, substance use, and poorer coping skills in subsequent years. However, at the 6-year follow-up, we did not observe any negative outcomes among the variables selected for these analyses. Rather, the only significant effects of parentification in this particular and special sample are beneficial: better coping skills and less tobacco and alcohol use. This outcome supports the notion that resilience, defined as positive outcomes despite serious threats to adaptation or development (Masten, 2001), is common even among those with many serious risk factors for negative outcomes.

It was of central interest to examine the participants' beliefs about parenting and the role of children. Maladaptive parenting attitudes were considered to be a strong possibility among those who were the most parentified in the sample. Imbalances in their own family systems due to parental incapacity may have led to unhealthy attitudes and expectations about children and their roles. Their parents may have been overly dependent on them, and the child may have missed important opportunities for development and growth during adolescence, especially those individuation opportunities requiring movement away from their parents and family. However, we did not find significant relationships on the construct level between the latent variables, or among the individual items that constituted the latent variables. In particular, the AAPI had one subscale specifically designed to tap into opinions about role reversals. Even if those who had reported more parentification did not report general maladaptive responses to the entire AAPI, it was possible that they harbored specific opinions relative to role reversals. However, this was not the case in this sample, indicating no evidence for the intergenerational transmission of dysfunctional attitudes about the role of children.

Second, we wanted to follow up with their emotional distress and substance use. Our earlier study determined a relationship between more parentified behaviors and more substance use. This cross-sectional relationship appeared again at baseline.

However, the relationship reversed itself at follow-up. Those who were more parentified at baseline actually reported less tobacco and alcohol use. In addition, hard drug use was reported extremely infrequently in this sample, which is encouraging because premature assumption of adult roles is often accompanied by the acquisition of other pseudomature behaviors such as substance use. Despite their parents' use of various substances, the children were using very little of those substances.

Baseline emotional distress and the overall parentification latent variable were not significantly associated with each other, although the relationship was in the positive direction. At follow-up, there was no relationship at all between more emotional distress and more parentification. Again, this is encouraging and supports those who find that there is a great deal of resilience among young adults even in the face of trauma and loss (Bonanno, 2004; Masten, 2001). These results also support those of Maysless et al. (2004), who found little association between role reversal and current adjustment in an adult sample.

We were concerned that the parentified youth would be unable to cope effectively when they grew up based on the maladaptive sequelae we found in the short term. It is very heartening that early parentification predicted better adaptive coping skills. Assumption of adult roles may have provided an enhanced sense of mastery and heightened self-esteem. Indeed, parentification was the only significant predictor of the entire latent variable representing adaptive coping, although male gender was particularly associated with one subscale: positive action. This relationship was added to the model to acknowledge this particular association.

The positive association between coping and parentification suggests that early assumption of adult roles may be protective for these particular youth and may have provided them with greater resilience in the long run. Very few traumatic events for children can surpass serious illness or death of a parent. Studies report a perception of benefit among people after negative life events such as bereavement, even if there are also negative effects (e.g., Lehman et al., 1993). Furthermore, others have noted that stressful episodes can be associated with the development of coping resources in adulthood (e.g., Aldwin, Sutton, & Lachman, 1996). As mentioned earlier, the sample was mainly African American and Latino, and parentification may not be a concept that makes as much sense in families imbued with more collectivistic and affiliative cultural values than the wider society. The children may be socialized to consider adult role assumption as a normative reaction to parents who need their help. This would have great positive meaning within the family and would be culturally supported. Factors that assist family or collective survival are meaningful in understanding behaviors among African American families (Anderson, 1999). The same can be said for Latino families. As an example, Latino "language-brokering" children who assist their parents appear to have a positive sense of ethnic identity and greater self-esteem (Weisskirch, 2005).

In addition to positive action, the coping latent variable had components concerned with spiritual hope and reaching out for social support. These particular psychological coping strategies have been described as key components in a range of positive life changes reported by individuals who have undergone negative events (McMillen & Fisher, 1998). Thus, our findings support those of others who have noted perceived benefits and the ability to thrive in the face of negative life events (e.g., Bonanno, 2004; McMillen, Smith, & Fisher, 1997).

## Other Findings

There were other findings and observations independent of associations with parentification. Resilience in the face of loss and trauma has been described as common among children growing up in disadvantaged conditions (Bonanno, 2004; Masten, 2001). In support of this viewpoint, we found relatively low levels of emotional distress in this sample, especially at the 6-year follow-up. Very few had scores high enough to suggest clinically significant levels of distress by the time of the 6-year follow-up, although the girls reported more distress than the boys at baseline. We found a small but significant effect of bereavement on more depression. However, bereavement did not significantly predict any other outcome. Other studies with this sample have found effects of bereavement on a more short-term basis (e.g., Rotheram-Borus, Stein, & Lin, 2001). We also found that if the PWH was female, the youth experienced more emotional distress and poorer parenting attitudes. This outcome provides an opportunity for further study.

Furthermore, as mentioned above, few were using tobacco or alcohol to excess, and very few were using hard drugs even though many of their mothers had been drug users and they were living in neighborhoods where drug use was common. Males and older participants reported more alcohol and tobacco use, and those who reported more emotional distress 6 years earlier were also more likely to be using these substances. Older participants and females had more realistic and appropriate ideas about parenting, which is probably developmentally based. Early emotional distress was negatively associated with later positive parenting attitudes.

## Impact of the Intervention

Parenting attitudes in these youth were significantly and positively impacted by the intervention even though it had been implemented several years before the 6-year assessment. There may have been both a direct effect on the youth and an intergenerational effect through their PWH. The family-based intervention focused in part on parenting skills for the PWH, including developmentally appropriate monitoring and communication, which may have translated to positive modeling of parental attitudes for the intervention youth. In addition, this intervention had demonstrated benefits for the intervention youth, including less emotional distress, better self esteem, and fewer risk behaviors at the 2-year follow-up (Rotheram-Borus, Lee, et al., 2001; Rotheram-Borus, Stein, & Lin, 2001), and, at long term follow up, fewer teen pregnancies, less dependency on federal subsidies, and greater employment and school enrollment (Rotheram-Borus, Lee, et al., 2004). Perhaps the intervention provided a window of opportunity for the youth to gain positive skills in emotional regulation and coping strategies that are reflected in parenting attitudes over time. Further investigation is needed to better delineate pathways of impact over time following behavioral interventions for youth of PWH.

## Limitations

This sample has special problems and challenges. We cannot necessarily generalize our findings to the wider community of youth who may exhibit signs of parentification when they are young. Greater pathology may be a possible risk in more normative families, whereas in a unique sample such as ours, parentification may be positive, adaptive, and helpful. In addition, our participants tend to live within high-risk urban

settings. This study would have benefited from a control group of healthy parents and adolescents living in circumstances similar to those of our participants to be followed over time.

### Clinical Implications

Despite the difficult life circumstances of the adolescents participating in our study, we find positive aspects of growth and development. Because of situational demands and the neediness of their PWH, many of the adolescent participants had become parentified or reported various parentified behaviors at a young age. It has been hypothesized that parentification has a pathological aspect that is assumed to manifest itself through developmental difficulties in coping and emotional skills, and adverse impact on future generations through intergenerational transmission of familial patterns of behavior and expectations (Barnett & Parker, 1998; Kretchmar & Jacobvitz, 2002). Although the broad behavioral and attitudinal variables selected for the study represented areas that could have been impacted by the pathological aspects of parentification, greater parentification did not lead to maladaptive or pathological outcomes among our study participants.

As noted by Barnett and Parker (1998), “successful coping, in the context of parentification, is likely to enhance self-confidence and self-esteem, perhaps resulting in a feeling of control over events and an enhanced tendency to plan for one’s future life” (p. 153). Although the PWH were substance users and abusers, their children tended to use very few substances, and those who had assumed adult roles earlier were inclined to use even fewer substances. Furthermore, their own parenting attitudes did not appear to be adversely impacted by their early experiences. These positive results may indicate that the negative consequences of drug abuse and poor partner selection may have motivated the youth not to repeat a similar life path and that the parent’s poor health and inconsistent relapse into hard drug use may have led the adolescents to depend on their personal resources at an earlier age rather than to expect a caring parent to provide for their needs. These two processes may have led to greater resilience. Further research is needed on this issue.

These findings suggest that clinicians consider the positive personal and cultural aspects of a child’s contributions to the maintenance of family life in the context of a parent’s physical illness such as HIV/AIDS. For youth living with a seriously ill parent, increased expectations to assist the parent and family are often an unavoidable reality. Clinicians should recommend support for children of parents with HIV and conduct brief assessments with them to evaluate if the children are coping well with the increased responsibility or becoming overwhelmed. Clinical interventions for adolescents of PWH should include a focus on skill building for youth that increases their positive coping with increased family responsibilities and that helps them maintain developmental opportunities in the context of parentification.

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