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Breaking the cycle of intergenerational abuse: The long-term impact of a residential care program

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Abstract

Objective: The number of youth in residential care programs who have been abused is high. The relationship between childhood abuse victimization and adult intimate partner violence (IPV) is well documented. This study compared the rates of IPV 16 years after individuals had participated in a long-term residential care program with individuals accepted to the program who did not participate. The IPV rates for these two groups were also compared to national normative data.

Method: Information on adult functional outcomes was obtained from former residential care and comparison youth via a confidential survey that was administered either by telephone or by mail. Analysis was limited to respondents who were currently married or involved in a marriage-like relationship ($n = 131$; 92% male).

Results: The IPV rates for the sample were 9.3% for those who stayed in the residential program less than 18 months and 6.5% for those who stayed more than 18 months, neither of which were significantly different from the national norm of 8.4%. The IPV rate for the comparison group was 26.1%, which was significantly higher than the national norm. Regardless of length of program stay, respondents who were maltreated in childhood had a 14.5% IPV rate, which was significantly lower than the estimated 36–42% rate projected for individuals with similar backgrounds.

Conclusion: We conclude that time spent in a treatment-oriented residential care program was associated with lower adult IPV rates. Specifically, the skills taught in a long-term, treatment-based residential program (e.g., healthy interpersonal relationships, self-government) may have a long-term beneficial impact for adolescents at high risk of adult IPV.

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Introduction

Child maltreatment is related to a host of adolescent behavioral and personality problems. Research has shown that many youth with conduct and substance use problems have histories of abuse and neglect (Crowley, Mikulich, Ehlers, Hall, & Whitmore, 2003; Egeland, Yates, Appleyard, & van Dulmen, 2002; Widom, Weiler, & Cottler, 1999). For example, studies have found that 50% of abused children meet the diagnostic criteria for anti-social behavior as adolescents (Egeland et al., 2002), and that childhood abuse is related to high rates of violent delinquency (Alfaro, 1981; Haapasalo & Moilanen, 2004; Kratcoski, 1982).

Given the relationship between child maltreatment and dysfunctional behaviors in adolescence, it is not surprising that youth who come into residential care programs have often experienced abuse or neglect. Research examining the history of maltreatment for youth in residential care has reported percentages between 57.0% and 80.5% for physical abuse, 61.0% and 78.0% for neglect, and 16.2% and 43.9% for having witnessed inter-parental violence (Brady & Caraway, 2002; Holland & Gorey, 2004; Hussey & Guo, 2002).

Childhood maltreatment is also associated with increased risk of violence later in life (Rivera & Widom, 1990; Widom & White, 1997). For example, many childhood abuse victims become adult perpetrators of both marital and parental aggression, creating intergenerational transmission of abuse (Carr & VanDeusen, 2002; Schafer, Caetano, & Cunradi, 2004; Stith et al., 2000). Of specific relevance to this study, there is a strong link between having a history of abuse and becoming either a perpetrator or victim of intimate partner violence (IPV; Coker, Smith, McKeown, & King, 2000; Herrenkohl et al., 2004; Murphy & Blumenthal, 2000; Schafer et al., 2004).

Data from an impressive longitudinal study found similar results. Ehrensaft et al. (2003) examined the connection between exposure to abuse and domestic violence in childhood and the risk of adult IPV. The data used were from a 20-year longitudinal study initiated in 1975 with children and their mothers in two upstate New York counties (Kogan, Smith, & Jenkins, 1977). In her research, Ehrensaft et al. (2003) used data from the fourth wave of the study which was conducted in 1999 with a sample of 815 of the original children; 582 individuals ($M=31$ years of age) responded to the survey. Results showed that youth who had been abused had an IPV rate of 36%, while those who had witnessed domestic violence had a 42% IPV rate. Being a victim of or witnessing domestic violence doubled or tripled an individual's risk of becoming a victim or perpetrator of IPV (Ehrensaft et al., 2003; Whitfield, Anda, Dube, & Felitti, 2003).

In addition to the strong research base supporting a link between either experiencing abuse or witnessing domestic violence as a child and the increased risk of becoming an adult perpetrator of IPV, there has also been substantial research on treatment issues associated with IPV. However, most of this research has focused on the identification of and intervention with those involved in IPV (Battaglia, Finley, & Liebschutz, 2003; Matevia, Goldman, McCulloch, & Randall, 2002; Rhodes & Levinson, 2003; Wathen & MacMillan, 2003). These efforts, while necessary, approach the problem retrospectively and deal with IPV only after it has occurred. A research review has found that efforts made to prevent IPV have met with limited success (Hickman, Jaycox, & Aronoff, 2004). This study seeks to address this gap in the research by examining the outcomes of a long-term residential, out-of-home program as it relates to breaking the intergenerational transmission of abuse, specifically IPV. It examines the relationship between a stay in a residential care program for adolescents and their involvement in IPV as adults, 16 years after leaving the program.

The intervention

The long-term residential care program has as its primary goal to provide a safe and therapeutic environment for at-risk youth. The youth typically come from unstable environments and face a wide array of problems such as prior abuse, behavioral disorders, and criminal activity. Most of the youth have had several prior out-of-home placements, have been unsuccessful at school, and were placed in the program by juvenile courts or state social services.

The intervention uses the Family Home Program, a modification of the Teaching Family Model. Group homes using the Teaching Family Model serve over 3,000 youth a year. The program emphasizes family-style living. A married couple lives in each home with six to eight girls or boys, ages 10–18. The couple, with the help of a full-time assistant, focuses on each youth's physical, spiritual, emotional development, and treatment needs. On average, youth stay in the program about 18 months.

The Family Home Program is based on behavioral theory and is characterized by five key elements (Davis & Daly, 2003). First, youth are taught how to build and maintain healthy relationships. An immediate and consistent emphasis is placed on youth getting along with others and developing positive, non-exploitive relationships. Second, youth are proactively taught interpersonal and life skills. Interpersonal skills include the appropriate way to act when meeting someone and how to follow directions. Life skills include how to keep a house clean, shop, and prepare food. Third, the program promotes moral and social development with an emphasis on values and a solid spiritual foundation. Youth attend religious services weekly and have basic values coursework in school. Fourth, the program is based on a family-style approach. The teaching family couple serves as parental figures in the home and engages youth in normal family activities, such as shopping for food, preparing meals, chores around the house, and leisure activities. The living environment is designed to mimic family life to the extent that it is possible. And finally, an emphasis is placed on teaching and practicing self-government and self-determination. Youth are consistently involved in making meaningful decisions about their lives, and encouraged to take on leadership roles within the program.

This approach has been effective at bringing positive behavioral change to youth both during and shortly after treatment. Research involving 440 male and female youth found that they had improved significantly on 16 of 17 standardized outcome measures (e.g., CBCL, DISC, ROLES) during their residential stay (the exception was CBCL Social Problems for boys, which showed a non-significant improvement), and were functioning as well as national samples 3 months after discharge (Larzelere, Daly, Davis, Chmelka, & Handwerk, 2004). However, questions remain regarding residential care programs' ability to produce lasting positive changes into adulthood. The current study examines the impact of residential care on mediating the effects of childhood maltreatment on adult IPV.

This effort surveyed individuals who received family-style residential care in the early 1980s and assessed their outcomes in adulthood, approximately 16 years later. The specific research question was: Does residential care mediate the negative impact of childhood maltreatment on adult IPV?

Methods

Participants

The study protocol was approved by the Girls and Boys Town IRB, and informed consent was obtained from participants. The sample was drawn from 587 consecutive youth who were accepted for admission

to a large residential care program in the Midwest between May 1981 and June 1985. During an earlier longitudinal study some of the study participants had requested no further contact and others were now deceased. A total of 464 individuals were eligible for participation in the current study, 399 who came to the program (residential group) and 65 who were accepted for admission but did not come for whatever reason (comparison group). The comparison group was considered a treatment-as-usual group and not a no-treatment group (Thompson et al., 1996). At the time of the survey, participants in the residential group had left the program an average of 16 years earlier. Because of the admission patterns in the early 1980s, 90.5% of the participants were male and 68.9% were Caucasian. The average length of stay in the program for individuals in the residential groups was 24.6 months ($SD = 19.6$), but lengths of stay varied widely, with a shortest stay of 13 days and a longest stay of 105.6 months. At the time of the survey, the average age of participants (both residential and comparison) was 32.7 years old (range of 27–37).

Information provided at the time of application to the program was used to compare the residential and the comparison groups to determine if there were any systematic differences between those who entered the program and those who did not. Seventeen variables were used in a MANOVA analysis, and included number of presenting problems, number of prior placements, number of primary parent changes, a crime victimization scale, IQ, math and reading achievement (California Achievement Test grade equivalency), and three measures of prior criminality (assault, property, and drug). There was no overall difference between the two groups [$F(17, 105) = 1.09, p = .38$]. This analysis supports the notion that the residential and comparison groups were basically comparable at the time of application for admittance to the program.

Response rate

Due to the mobility of the population in this age range and the number of years since last contact, a significant effort was required to locate, contact, obtain informed consent, and interview participants. Efforts at locating these individuals included calling people on contact lists (e.g., relatives, friends), hiring professional search services, and extensive use of Internet resources. Of the 464 possible participants, confirmed contact was made with 273 (58.8%). Of these, 252 completed the survey (94.4%), 15 agreed to participate but never completed the survey (5.5%), and 6 refused to participate (2.2%). Thus, 54.3% of the eligible population participated. The response rates for residential care (52.9%) and comparison (63.1%) youth were not significantly different ($p = .13$).

Both the residential care and comparison groups had participated in an earlier longitudinal study from 1985 through 1989 and so extensive information was available for everyone in the potential participant pool. A comparison of respondents and non-respondents was made across 22 variables using MANOVA. Nine of the variables were collected at admission to the program, and included age at admission, number of presenting problems, number of previous placements, and so forth. Thirteen of the variables came from the original longitudinal study and included perception of treatment by adults, aggression and victimization, substance abuse, quality of life, and so forth. There was no significant difference between respondents and non-respondents for the variables included in this analysis [$F(88, 1332) = .832, p = .87$], supporting the basic equivalency of the two groups.

US national data

A central study objective was to compare the results from this survey with national data from the United States across a broad variety of outcome measures, of which IPV was one. Where possible,

the survey questions were selected from various national normative surveys. Preference was given to those US national studies whose explicit purpose was to describe the population at large. The national data sets used were: the Behavioral Risk Factor Surveillance System (BRFSS), the General Social Survey (GSS), the National Survey of Families and Households (NSFH), the Roper Social Capital Survey (Roper), and the National Household Survey on Drug and Alcohol (NHSDA). Although several national surveys were utilized, this study focused on IPV and used the IPV question from the National Survey of Families and Households (Sweet & Bumpass, 1996). A stratified random sample was taken from the NSFH 1996 data (Sweet & Bumpass, 1996) to match the age (27–37), sex (92% male), and racial (69% Caucasian, 21% African-American, 5.6% Hispanic, and 4.4% other) proportions for our respondent sample.

Intimate partner violence criterion

As per the NSFH, all participants who were in a marriage or marriage-like relationship (those living with a partner in a committed relationship) were asked the following NSFH question: “Sometimes arguments between spouses or partners become physical. In the past 12 months, has this happened in arguments between you and your spouse/partner?” Respondents who answered yes to this question ($n = 16$) were classified as being involved in IPV. Six respondents identified themselves as the sole perpetrator, two identified their partner as the sole perpetrator, and eight responded that both partners perpetrated IPV within the last 12 months. While the context for this question was as close to the NSFH as possible, the overall survey was different as our survey focused on several areas of adult life functioning.

Survey

The survey had 151 items and was administered either by telephone or mail, depending on the participant’s preference. The goal was to measure social functioning and quality of life domains. The general topic areas were: (1) living environment and community involvement, (2) physical and mental health and well-being, (3) substance use, (4) household composition and family relationships, (5) safety, victimization, and criminality, (6) friendships and social activities, (7) education and employment, and (8) current perspective on the value of the residential program.

Most surveys were completed between February and December of 2002. The phone interview took approximately 45 min, and participants were reimbursed \$50 for their time.

File review

An archival file review was conducted for the 211 residential participants who completed the survey. This information was not available for the comparison group as the physical admission file was destroyed shortly after it was determined that they were not entering the program, nor was it available for the NSFH sample. The social history information that was collected at the time of admission came from a variety of sources including the youth, parents, relatives, caseworkers, school records, psychological evaluations, clergy, police reports, and court records. We felt that these sources were more dependable than asking the participants 16 years later, because of the memory issues of bias, distortion, and repression. The information in the files was a more “real time” account of the events that had occurred in the youth’s life prior to admission.

The authors served as the file reviewers. Double file reviews were conducted on 24 randomly selected respondents (11% of the reviewed files) to determine interrater reliability. Reviewers coded (yes or no) whether there was any indication of physical or sexual abuse, neglect, or witnessing domestic violence reported in the youth's file. The interrater reliability was high (Kappa = .86) indicating consistency among the reviewers. For the purpose of this study, we classified an individual as maltreated if there was any mention of physical, emotional, or sexual abuse, neglect, or witnessing IPV. This approach seemed appropriate because if maltreatment prior to coming to the program was mentioned anywhere in the admission file, then it was assumed to be a relevant issue at admission. Almost 48% of the respondents in the residential group had some type of maltreatment in their social history upon admission to the residential care program.

Sample

Of the 252 individuals (residential and comparison) who responded to the survey, 30 were in a correctional facility and were removed from the analysis. Their removal was necessary, as we did not have any information on how long they had been incarcerated and therefore did not know if they had had an opportunity to engage in a physical argument with their spouse or partner in the past 12 months. Further, removing the inmates made our sample more representative to the NSFH data, which did not include anyone who was incarcerated. Of the 222 remaining respondents, 154 reported that they were currently in a "marriage or marriage-like relationship." All analyses were based on these 154 respondents (131 residential and 23 comparison).

Length of stay groups

Consistent with the results from earlier research and the view that a certain amount of time in residential care is necessary for youth to receive a full treatment dose (Daly, Thompson, & Coughlin, 1994), this study used length of stay as a grouping variable. Accordingly, residential care respondents, who were in the program less than 18 months were viewed as having received "less than full treatment" ($n = 54$), while those in the program for 18 or more months were viewed as having had sufficient time to receive the "full treatment dosage" ($n = 77$). Youth who stayed in the program at least 18 months were different at admission from youth who stayed less than 18 months. Using the same variable set used in the comparison of residential care with comparison youth, there were five significant differences [$F(17, 88) = 2.517$, $p = .003$]. On average, youth who stayed in the program less than 18 months came from a more restrictive setting, had more presenting problems, had more prior family and institutional placements, and scored higher on a scale of drug usage. Length of stay in the program was determined by multiple causes, only one of which was program completion (i.e., either meeting specified treatment objectives or High School graduation). Table 1 shows that more than two thirds of the At Least 18 Months Group completed the program. The Less Than 18 Month Group, however, had nearly an equal percentage who withdrew early from the program (initiated by the youth, their family, or the placement agency). These differences between the two groups were statistically significant [$\chi^2(2, N = 131) = 28.41$, $p < .001$]. Typically, youth were terminated from the program for chronically inappropriate behavior that presented safety risks to themselves or others. The average length of stay for those in the Less Than 18 Months Group was $M = 10.1$ months ($SD = 4.48$; range 13–502 days). The average length of stay for those in the At Least 18 Months Group was $M = 38.8$ months ($SD = 17.37$, range 570–3,214 days).

Table 1
Reason for leaving residential program by length of stay group

	Time spent in program		Total (<i>n</i> = 131)
	<18 months (<i>n</i> = 54)	≥18 months (<i>n</i> = 77)	
Program completion (%)	24.1	70.1	51.1
Early withdrawal (%)	63.0	20.8	38.2
Program termination (%)	13.0	9.1	10.7
Grand total (%)	100	100	100

Statistical analyses

Logistic Regression was used to examine the IPV rates for the residential and comparison groups. The NSFH national normative data set comprised the reference category against which the IPV rates for the other groups were compared. Additionally, chi-square tests were used to compare the IPV rates for residential group respondents with a history of maltreatment with: (1) residential group respondents without a history of maltreatment and (2) the expected IPV rate for individuals with a history of maltreatment.

Results

The IPV rates for the residential and comparison groups are shown in Table 2. Logistic Regression was used to examine the IPV rates for the residential and comparison groups. For this analysis, the NSFH national normative data set comprised the reference category against which the IPV rates for the other groups were compared. Results indicated that there was a significant group effect for IPV [Wald statistic (3) = 7.89, $p = .048$], with the comparison group (i.e., those accepted to the residential program who did not come) having a significantly higher IPV rate than the national norm ($OR = 3.85$, $CI = 1.43, 10.40$). Conversely, the IPV rates for the two residential care groups were not significantly different than the national norm. Individuals with less than 18 months had an $OR = 1.11$ ($CI = .42, 2.98$) and those with at least 18 months had an $OR = .76$ ($CI = .29, 2.00$).

Because information on maltreatment history was available only for the residential groups, additional chi-square analyses were run for these participants, comparing the IPV rates within the groups stratified by maltreatment history. Overall, residential group respondents with childhood maltreatment were significantly more likely to report IPV (14.5%) than those with no evidence of maltreatment (3.0%, $p = .036$).

Table 2
Intimate partner violence (IPV) rates for comparison and treatment individuals who were currently involved in a relationship

	Involved in IPV (%)
National sample (NSFH ^a ; <i>n</i> = 417)	8.4
Comparison group (<i>n</i> = 23)	26.1
<18 months in residential treatment (<i>n</i> = 54)	9.3
≥18 months in residential treatment (<i>n</i> = 77)	6.5

^a National Survey of Families and Households.

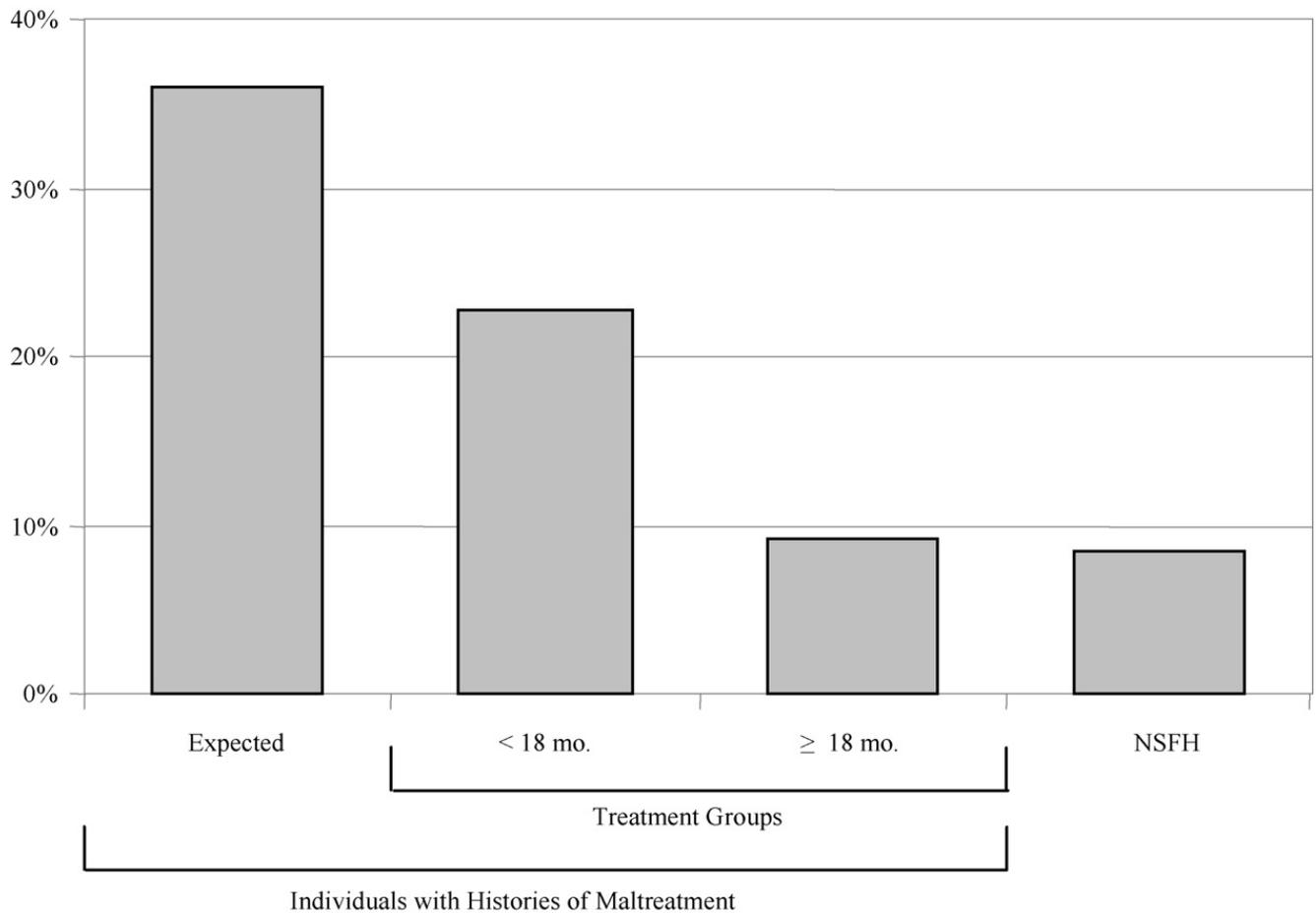


Figure 1. IPV rates for individuals with a history of maltreatment and the National Survey of Families and Households (NSFH) national sample.

Research has shown an IPV rate between 36% and 42% for individuals who were abused or witnessed abuse as children (Ehrensaft et al., 2003). Using the more conservative estimate (36%) as the expected value in a goodness of fit test, the 14.5% IPV rate for residential group respondents in this study with a maltreatment history was significantly lower ($p < .001$). There was also a non-significant tendency for individuals with maltreatment histories to have lower adult IPV rates if they were in the program at least 18 months (9.1%) than if they were in the program less than 18 months (22.7%; $p = .23$), see Figure 1.

Discussion

This paper reports the only long-term study evaluating the impact of adolescent residential treatment on adult IPV. This was done by comparing the IPV rates for residential care and comparison groups to the US national data obtained from the National Survey of Families and Households, 16 years after the residential care group had left treatment. Our findings were consistent with the view that residential care can be associated with a decrease in adult IPV for individuals who are at high risk of this type of

behavior. Overall, participants who had been in a residential care program had IPV rates similar to the US national rate. Respondents who were in the comparison group were significantly more likely to be involved in IPV as adults than the national rate. It is unclear why individuals in the comparison group did not come to the program after being accepted for admission, but the higher IPV rate for this group is noteworthy in that there were no significant differences between the residential care and comparison groups across 17 risk factors collected at the time of application to the program. The only known systematic difference that we are certain exists between the residential and control groups was time spent in the program. There was no statistical difference between the IPV rates for the two residential length-of-stay groups.

As previously mentioned, maltreatment history was only available for individuals who were in the residential group. Respondents with a history of maltreatment (including sexual or physical abuse, neglect, and/or witnessing domestic violence) were significantly more likely to report IPV (14.5%) than those without a history of maltreatment (2.9%). While the IPV rate for those who were maltreated was four times higher than the rate for those who were not maltreated, it was still significantly lower than the 36–42% IPV rate that other longitudinal research has indicated might be expected from this population (Ehrensaft et al., 2003).

What are the elements of the residential program that may have contributed to helping at-risk individuals avoid IPV as adults? One possible explanation may be the nature of the intervention. The program focused heavily on building and maintaining positive, non-exploitive healthy relationships. Relationship building plays a role in every aspect of a youth's life while in the program. The family-style environment is intended to provide a firsthand model for how a healthy, married couple functions. Research has shown that social learning approaches can be effective in reducing intrafamilial aggression and abuse (Conger, Neppl, Kim, & Scaramella, 2003; Timmer, Urquiza, Zebell, & McGrath, 2005). Youth are not only told how people can appropriately disagree in a relationship, but are allowed to observe it in a natural, everyday setting. Further, when youth engage in inappropriate behavior, the correct behavior is reviewed, and an opportunity is given to practice appropriate behavior. Obviously, the longer youth participate in the program, the more interactions they will observe, and the more opportunities to practice relationship skills with other youth and adults. Another advantage of the program is that not only do the youth live in homes that emulate a family style environment, but they are part of a larger residential community in which everyone is trained in the program model. This ensures that the approach and intensity of the program are consistent, even when the youth are out of the home. Monitoring and teaching interactions occur at school, at a neighbor's house (in the community), and when at a store or sporting event. The pervasiveness and consistency of the program serves the goal of reinforcing the internalization and generalization of the desired cognitive and behavior changes.

Another possible contribution to the reduction in IPV for our residential group respondents may have to do with the simple disruption of the adolescent phase of troubled behavior. Research has shown that childhood maltreatment is correlated with adolescent delinquency and substance use problems, which in turn are related to adult IPV. Minimizing this adolescent phase can perhaps reduce the extent to which this behavioral sequence contributes to adult IPV. By limiting the amount of time that can be devoted to adolescent delinquency and substance use, there may be less of a chance for these negative influences to carry over into adulthood. In this way, the more time spent in the program, the greater the disruption in exposure to negative influences. The question, however, is whether simply disrupting adolescent delinquency is sufficient cause for the reduction of adult IPV found in our results. If this is the case, IPV research with other residential milieus should produce similar results.

Limitations

The first limitation is lack of random assignment. The treatment and comparison groups were not significantly different on 17 measures taken in adolescence, but that does not eliminate the possibility that they might have systematically differed in ways that directly or indirectly impact adult IPV. The use of alternative approaches such as regression discontinuity or propensity score matching designs may be the only practicable solutions to this enduring problem in applied research settings.

Another limitation was the passage of 16 years between treatment in adolescence and the measure of adult IPV reported here. Even given a long-term residential care experience, these individuals had since experienced 16 years of “life” intervention, and this certainly becomes an issue for attributing cause. The results for the comparison group, which also experienced the same level of life experience, provides evidence that is consistent with the view that residential treatment had a long-term beneficial effect.

This analysis was also based on those individuals currently in a marriage or marriage-like relationship during the past 12 months, which is only about half of our respondent group. Our analysis was limited to this subsample because this matched the NSFH data, which only asks questions about IPV of those in a “marriage or marriage-like relationship” in the past 12 months. For both samples, it is possible that a selection bias exists, as those who are most prone to IPV might not be successful in maintaining relationships and, therefore, less likely to be in a current relationship. The potential for this type of selection bias seems to be fairly consistent within IPV literature, which typically limits IPV questions to those currently in a relationship (Fals-Stewart, Leonard, & Birchler, 2005; Herrenkohl et al., 2004). We recognize that our larger sample may include perpetrators or victims of IPV who were not included in the analysis.

One more constraint was the 53% response rate. It was very challenging to find many of these individuals so many years after our last contact with them. We do know that some people had living circumstances that made it very difficult, if not impossible to contact them (e.g., we were unable to make contact with a man identified by his family as being homeless in Minneapolis, and another man who was living with his girlfriend in a motor home in business parking lots in Arizona). Conversely, we do not have any data from several individuals living in very affluent areas who did not respond to our recruiting materials. Not having the outcomes for individuals in these circumstances likely impacts our final results, but it is difficult to unequivocally determine what that impact was. However, the respondent/non-respondent analyses using a broad range of available material did not show any significant differences between these groups, indicating that our results are likely representative.

That 92% of the samples (both the treatment and comparison groups) were male was an additional limitation. While an interesting analysis would have been to compare the results for males with those for females, the number of women in this study was simply too small to allow for this type of analysis.

Further, the admission and in-program information used in the file review did not include a specific assessment of childhood maltreatment. It was, therefore, impossible to assess accurately the incident frequency or severity of childhood maltreatment experienced by participants in this study. The assumption was made that if maltreatment was mentioned in the file, then some type of significant event had occurred. This approach likely resulted in the underreporting of maltreatment histories. Although impossible to determine, it may be that those individuals in our sample who were identified as having a history of maltreatment were the victims of more severe events, or were the most troubled by their maltreatment. It is hard to estimate what effect this may have had on our results.

It is also possible that the levels of IPV may have been underreported due to social desirability. However, as the question was the same for both the national sample and the respondents in this study, this limitation

would likely be consistent for both groups. Further, in other topic areas in the survey we used, where one might expect the potential for answers to reflect social desirability, underreporting of undesirable behavior does not seem to have occurred. Examples of this include the topics of arrest rate and drug usage. While the results for these areas are not reported in this paper, our study respondents reported a higher arrest rate within the last 12 months (17.9%) and higher drug use (36.2%) than the national norms (5.0% and 17.0%, respectively).

Finally, both the study researchers and employees of the residential center's national crisis hotline conducted a significant number of the interviews by telephone. This procedure runs the risk of our results being subject to an ascertainment bias, as those conducting the survey knew whether the respondent was part of the comparison or residential group. Thus, interviewer behavior potentially could skew the answers one way or another. However, we feel that this was not the case for several reasons. First, even though the interviewers knew if the respondents received the residential treatment, they did not know their length of stay, as this information was obtained later. Also, the survey was offered, at the choice of the respondent, in either phone or mail versions. While there were more phone interviews than mail (61.7% vs. 38.3%), there was no difference on the IPV question ($p = .54$).

Implications

This study examined the impact of residential care on IPV. Skills taught in a treatment-based residential program were associated with long-term positive outcomes for at-risk adolescents, as reflected in the generally low levels of IPV for study participants who received this type of care. This even held true for those youth with a history of maltreatment. It is not clear how well social skills training and social learning in adolescence would function apart from a comprehensive residential program, but this type of intervention might be an especially valuable part of any treatment offered to youth with a maltreatment history.

A significant number of youth receive residential care services at some time in their life, and many of these youth have been maltreated. A definitive report of the number of youth receiving residential care services does not exist; however, over 97,000 state child welfare foster children were in residential or group care placements at one point in 2003 (US Department of Health and Human Services, 2003). Because many children in residential care are court ordered or private placements, the total number is likely to be several times larger than this. Given this large number, there is great potential for residential care to play a role in reducing adult IPV in this population.

While this research is limited due to the non-random assignment design, the findings about the potential for adolescent treatment in the prevention of future IPV are promising. Future research in this area should cross validate these results with those from other programs caring for youth with similar needs. Especially valuable would be research that links specific program elements with decreases in IPV.

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Résumé/Resumen

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