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Community reinsertion success of street children programs in Brazil and Peru

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ABSTRACT

After decades of assessing and describing the street children population, more attention is needed to evaluate the impact of street children programs on successful reinsertion into the community. The purpose of the current study was to assess the impact of two model street children programs on successful reinsertion: Associācao Promocional Oracão e Trabalho (APOT) in Campinas, Brazil and Instituto Mundo Libre (IML) in Lima, Peru. This study determined common characteristics of street children in the programs and predictors of community reinsertion success. The results suggest that the programs were successful. Overall, 56% of the residents at APOT and 48% of those at IML were successfully reinserted into the community at the time they left the program. For both programs, the majority of former residents that were successfully reinserted into the community returned to the homes of their families. Source of referral to the street children program, length of stay in the program, and prior formal education were important predictors of successful reinsertion. Detailed descriptions of these model programs are provided, including treatment approach and implementation of services. Implications for future program development and evaluation are addressed.

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1. Introduction

According to an estimate from UNICEF, there are tens of millions of street children across the world (UNICEF, 2006: 40–41). These children are referred to by various terms and categorizations among diverse cultures, but the official definition put forth by the United Nations is "any girl or boy [...] for whom the street (in the widest sense of the word, including unoccupied dwellings, wasteland, etc.) has become his or her habitual abode and/or source of livelihood; and who is inadequately protected, supervised, or directed by responsible adults" (ICCB, 1985).

As researchers delve into the lives of street children, the epidemic facing these children and their communities rapidly unveils itself and is evidenced by extremely high rates of substance abuse (Ginzler, Cochran, Domenech-Rodríguez, Cauce, & Whitbeck, 2003; Kaime-Atterhog & Ahlberg, 2008; Plummer, Kudrati, & Yousif, 2007); risky sexual behavior (Kaime-Atterhog, Lindmark, Persson, & Ahlberg, 2007); chronic and severe health issues and emotional problems (Kerfoot et al., 2007; Thompson, 2005); and barriers to health care (Farrow, Deisher, Brown, Kulig, & Kipke, 1992; Van Rooyen & Hartell, 2002). As a result of their circumstances and street behavior, they are at higher risk for HIV, hepatitis, sexually transmitted diseases (Abadia-Barrero, 2002; Bond, Mazin, & Jiminez, 1992; Kaime-Atterhog et al., 2007; Luna &

Rotherman-Borus, 1992; Raffaelli et al., 1995), and unwanted pregnancy (Orme & Seipel, 2009).

To date, research in this area has focused on documenting the extent of the problem, the root causes, and programs that are needed, rather than on evaluating the impact of existing street children programs (Dybicz, 2005; Ferguson, Dabir, Dortzbach, Dyrness, & Spruijt-Metz, 2006; Karabanow & Clement, 2004; Wittig, Wright, & Kaminsky, 1997). The current study examines the impact of street children programs on successful reinsertion of street children into the community. Specifically, this paper presents an outcome evaluation study of two model street children programs. Associãcao Promocional Oração e Trabalho (APOT) in Campinas, Brazil and Instituto Mundo Libre (IML) in Lima, Peru. Both programs are rehabilitative, residential institutions that also provide outreach services to street children through street educators. Evaluation in this area is essential to determining best practices and better understanding programs that foster successful reinsertion of street children.

The tide of concern for the problem of street children initially evolved out of the issues raised in the early 1980s following the International Year of the Child (Rosemberg & Andrade, 1999). The plight of street children has become more visible as the role of tourism and mass media dissemination of highly publicized incidents of violence against street children served to galvanize the image of street children as an international problem (Hecht, 1998). However, the presence of children living, working, and playing in the street as part of the process of industrialization and urbanization is clearly not a recent phenomenon. Increased population migration from rural subsistence farms to developing urban areas has led to chronic

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unemployment and emergence of makeshift shantytowns that consist of millions of impoverished families living in substandard housing that lacks water and electricity. Industrialization and urbanization have meant major economic, social, and cultural changes that have placed a tremendous strain on millions of families, cultivating problems of poverty, homelessness, malnourishment, illness, and illiteracy (Celia, Alves, Behs, Nudelmann, & Saraiva, 1993; Lusk, 1989; Milnitsky, 2006; Rios, 1990).

The precise number of street children throughout the world is still unknown. This is, in part, due to the difficulty in identifying these children. Street life is such a fundamental component of poor economies and societies with vastly disproportionate living wages that these children blend into the societal picture, making their necessitated presence on the streets so much the norm that there is a lack of perception that a problem exists. Difficulty tracking the number of street children is also due to inconsistent definitions and categorizations of these children (Panter-Brick, 2002). Further complicating the issue is the anonymity of these children because they are constantly moving and unlikely to reside in a shelter or program where data are collected (Farrow et al., 1992; Pinzon-Rondon, Hofferth, & Briceno, 2008). Additionally, they avoid medical treatment due to their fear of those in authority and their desire to stay hidden to prevent being sent to prison or back home (Van Rooyen & Hartell, 2002).

For the reasons mentioned above, the exact number of street children has been difficult to quantify. According to a recent estimate from UNICEF, there are tens of millions of street children across the world (UNICEF, 2006: 40–41), although they have also reported estimates of more than 100 million (UNICEF, 2002: 37). *Every Child* (2008) reports that an estimated 100–150 million children live and/or work in the streets worldwide. Estimates of street children in Latin America also have vastly differed. In fact, *Jubilee Action* reports that estimates of street children in Brazil alone have ranged from 200,000 to 8 million (Jubilee Action, n.d.). Regardless of the actual number of street children, it is evident that the numbers are vast and a fair amount of research has been conducted to better quantify this population.

2. Street children phenomenon

Street children are typically between the ages of six and 17 and they live "without the support of traditional societal structures, such as family, school, church, and community institutions" (Farrow et al., 1992). Dybicz (2005) maintains that research has recently focused on two main categories of factors that either "push" or "pull" children into street life. Factors aligned with "pushing" children to the streets include abuse, neglect, food deprivation, and homelessness, and the factors attributed to "pulling" or attracting children to the streets include earning income, being with close friends, or the lure of nice things in the city. Dybicz (2005) notes that, "All factors leading to street life are rooted in extreme poverty" (p. 765).

The literature that exists internationally classifies street children as either being on the street or of the street (Kombarakaran, 2004; Panter-Brick, 2002; Pare, 2004). Children on the street represent the vast majority of children who are classified as street children. They are sometimes referred to as "market children" because they work in markets, as street vendors selling gum, candy, etc., or they perform as singers or dancers or do odd jobs such as shine shoes or provide tourist assistance. These children frequently live with their families, bringing home food or money they earn in the streets to help the family survive. Additionally, because many countries do not have mandatory free public education, a significant number of these children cannot afford to attend school, and many who are enrolled in school do not go because they need to work to survive (Ali, Shahab, Ushijima, & de Muynck, 2004). Working in the streets, these children learn deviant behavior and neglect their education (Beyene & Berhane, 1997; Campos et al., 1994; Celia & Kaplan, 1994; Lusk, 1989; Wittig et al., 1997).

Children of the street have left their families to live full time in the streets. They typically come from a family where conflict, death of a parent, war, and alcohol and drug abuse are common (Dybicz, 2005; Kerfoot et al., 2007; Plummer et al., 2007; Rios, 1990; Rizzini, 1998). Some were rejected by their families for behavior problems or were physically abused for not being successful at bringing home money. Some have been sexually abused and others have been lured by street diversions such as drugs and the freedom street life offers (Hecht, 1998; Rios, 1990; Rizzini, 1998). Children of the street commonly form their own networks, social systems, surrogate families, or gangs that they rely on for protection, money, and emotional and social support (Lam & Cheng, 2008; Orme & Seipel, 2009; Stephenson, 2001). Unfortunately, these street groups often encourage or reinforce delinquent and illegal behavior, such as drug abuse, crime, and prostitution (Kaime-Atterhog et al., 2007).

Children of the street are considerably more likely than market children (on the street) to sniff glue, use alcohol, smoke tobacco, get arrested by police, earn money by begging and stealing, be criminally victimized, and suffer from health problems (Wittig et al., 1997). Plummer et al. (2007) found that inhaling glue was a contributing factor to the transition from working to living in the streets. Children of the street are also subject to verbal, physical, and sexual abuse by the police (Kudrati, Plummer, & Yousif, 2008; Ribeiro, 2008; Ribeiro & Ciampone, 2001) who view them as criminals and try to force them off the streets.

3. Street children programs

Due to the many adversities street children face, it is vital that effective programs be provided to shield them from a world of violence and drugs, and to equip them with an education and skills to help them find alternatives for a better life. Milnitsky (2006) states that a major issue with street children programs in Brazil is that they continue to be based in the belief that living in the streets is a choice made by children, and they fail to recognize that many times these children are left with no other option. Medina-Mora, Gutierrez, and Vega (1997) suggest that the public perception of street children is based on stereotypes of severe cases reported in the media. As a result, the wide range of situations and needs of children who are "on the street" and "of the street" are not well understood. The authors note an additional problem is that the programs offered are often disjointed and children "go in and out of them according to their felt needs, usually not remaining for long periods of time in any of them" (p. 310).

Lusk (1989) notes that programs and government policies directed at street children have tended to fall into three categories of program types: corrective, rehabilitative, and outreach strategies. The corrective approach applies punishment or detention methods to discourage delinquent behavior of street children. Overcrowding, crude sleeping quarters, and physical abuse by guards are commonplace (Hecht, 1998). Rehabilitative programs apply models aimed at changing the behavior of street children by teaching alternative values, developing vocational and life skills, or applying behavior modification approaches. Outreach strategies are aimed at identifying street children and offering a variety of services to them. Some programs offer food, beds, and showers on a walk-in basis, while others require residential living with commitment to reform (Wittig et al., 1997).

Based on the aforementioned research, it is evident that there are many individual and programmatic factors that need to be considered when providing intervention programs to street children. Without a thorough assessment of program impact, however, predictors of successful outcomes cannot be determined.

4. Evaluation of street children programs in Brazil and Peru

The current study focused on the evaluation of two model street children programs: Associacao Promocional Oracao e Trabalho (APOT) in Campinas, Brazil, and Instituto Mundo Libre (IML) in Lima, Peru. At the time of this study, both programs had been in existence for 15 years or more. Both were residential institutions that also provided outreach services to street children through street educators. Although both programs would be classified as "rehabilitative," each had distinctive program components that were designed to address the unique needs of street children. This section describes the programs in detail, including the services, activities, theory-based approaches, and behavioral models implemented.

Staff members from both programs perceived that the most immediate needs of street children upon entry to the programs are food, medical attention, sleep, clothing, affection and physical contact, and protection from pressure by drug dealers, family, or the court. Therefore, the children were immediately given food, shelter, and clothing, as well as medical and psychological assessments. After immediate needs were taken care of, staff members worked with the children individually and in groups to ensure that they acquired the necessary skills and education to be successfully reinserted into society.

Both programs sought to promote the development or enhancement of the children's cognitive, emotional, and interpersonal skills. They attempted to accomplish these goals by offering opportunities for children to acquire knowledge through regular attendance in school, by building self-efficacy through technical classes and art workshops, by learning new social skills through group and individual therapy and pro-social involvement, and by building trusting relationships with adults who offered support and assistance in resolving problems with families, police, and schools. According to staff, the extent to which children actually participated in the various program services was dependent upon several factors related to individual needs and interests of the child.

The key activities and services implemented by both programs focused on two main models of substance abuse treatment: the Therapeutic Community (TC) approach and the Tough Love approach. Therapeutic Communities are drug-free residential settings that use a hierarchical model with treatment stages that reflect increased levels of personal and social responsibilities. The Tough Love approach focuses on teaching the connection between behavior and consequences through the practice of setting clear limits and boundaries and being consistent in enforcing rules and consequences for unacceptable behavior. The programs implemented key principles that stemmed from these approaches, including: therapeutic community morning meetings; individual therapy sessions; group therapy sessions; art or expressive therapy; vocational skill building; relationship building; setting clear consequences for breaking rules and for excessive verbal warnings; encouraging the children to think about the consequences of their behavior; a reward system with privileges and responsibilities; use of religion to teach life lessons; promotion of health and hygiene; staff display of a united front; and staff promotion of self confidence.

4.1. Associãcao Promocional Oracão e Trabalho, Program in Brazil

The overall objective for Associacao Promocional Oracao e Trabalho (APOT), which means "Association for the Promotion of Spirituality and Work" in English, was to facilitate recovery from substance use and to promote successful reinsertion to the community through educational and vocational training. There were three stages of the program: (1) the Open House (Casa Aberta), (2) Middle House (Casa do Meio), and (3) the Jimmy Hendricks House (Casa Jimmy). The Middle House and the Jimmy House are the components of APOT that were evaluated for this study. APOT provided services for males only, serving children and young adults at the time of the evaluation.

The Open House is a facility that was located in downtown Campinas and served as an outreach center where children could get meals and showers. Some of the children who went to the Open House were eventually admitted to Jimmy Hendricks House, sometimes by way of the Middle House. Street educators at the Open House first interviewed these children to find out if they had been using drugs and were willing to participate in a drug treatment program. For those who wanted to stop using drugs, the educators explained the responsibilities and expectations of the APOT program. Then, they asked the children for the name of a parent or guardian so that they could be contacted. If there was no one, a social worker would find someone to give permission for the child to participate in the program. The Brazilian juvenile delinquent program at the time, FEBEM (now called Fundação CASA), sent all of their referrals to the Open House first. The Middle House was a half-way house for the adolescents with more serious problems, and they typically lived there between 6 and 12 months. Before they were reinserted into the community, these adolescents were brought to the Jimmy Hendricks House to spend up to six months as part of their "rehabilitation" process. The Jimmy House accepted street children directly from the streets, as well as those who had progressed through the rehabilitative stage at the Middle House.

At the time of the study, APOT staff members met regularly to evaluate the children on behavioral criteria to determine if the children were making progress and whether they were ready to move to the next stage of the program. Staff also discussed how positive behaviors could be reinforced with each child, as well as how inappropriate behavior could be addressed. If the staff perceived that a child had completed the program successfully, then he/she was ready for reinsertion into the community. Unfortunately, APOT did not have the resources at the time to formally follow up with these children after the reinsertion stage.

4.2. Instituto Mundo Libre, Program in Peru

Instituto Mundo Libre (IML) in Peru, which means "Free World Institute" in English, is a foster home for street children and operates in 11 states in Peru. The evaluation only included the U.S. State Department-funded program, which was in Lima. The program's purpose was to provide a supportive environment where the rehabilitative and resocialization process could prepare the children to be reinserted into society with the ability to be independent. IML provided services for male children and young adults at the time of the evaluation.

There were five stages of the program: (1) Orientation; (2) Pre-Community; (3) Community; (4) Family Reinsertion; and (5) Followup. The Community stage is the only component of the program that was assessed for the current study. The Orientation stage lasted two months and consisted of street workers recruiting new children to the program. The Pre-Community stage was a three-month detoxification, and the focus was on integrating the children into the program and the community of other residents. The Community stage was a one-year program that focused on changing children's behavior and promoting personal growth by developing skills and reinforcing positive values.

The Family Reinsertion stage focused on the child's reinsertion with his family or family substitutes. During this stage, staff worked with the family to create a favorable atmosphere of awareness, harmony, and reintegration. In families where parents were abusive or had alcohol or drug addictions, the program staff worked with children to build skills and self-confidence to establish their own independence. The Follow-up stage initially occurred every 15 days to three months after the child left the program. According to staff, they met with children three to four times every two months for up to three years to monitor their adaptation. They checked to see if the child was being adequately cared for, was still off drugs, and doing well in school. If there were no family members for younger children, then the Program Director obtained assistance from the Legal Bar Association for alternative placement.

At the time of the study, IML program psychologists had developed a monthly behavior monitoring system that was used to assess the progress of each child and to determine whether he had developed sufficiently to move to the next stage of the program. The child was evaluated along four separate criteria of development: (1) stability, (2) ability to incorporate norms and skills while living with others, (3) participation in activities, and (4) personality development. For each of these criteria, specific behavioral goals were monitored as indicators of progress. Expectations for the child's level of behavior increased as he moved from earlier program stages to the reinsertion stage.

4.3. Research questions

The current study was conducted to determine the effectiveness of the APOT and IML programs in successfully reinserting street children into society. We addressed the following three research questions concerning the reinsertion process for street children in these two programs:

- 1. What are the individual characteristics, source of referral, and length of stay of former residents of APOT and IML street children programs?
- 2. What percentage of former residents of APOT and IML has been successfully reinserted into the community?

3. What are the predictors of community reinsertion success (e.g., demographics, source of referral, education, length of stay)?

5. Research methodology

5.1. Sample and database records

The evaluation of APOT (Middle House and Jimmy House residents) and IML included males who had left the program between 1994 and 1999 for whom data were available. Former residents' record data were maintained by APOT and IML during this time. For this study, we used all relevant record data that were in a computer database or in hardcopy files maintained at each institution. All program entry and departure dates were checked for errors and caution was taken to check for duplicate cases by matching names and birth dates and verifying changes with program staff. Each child constituted a single case regardless of how many times he entered the program. Children had to stay in the program for at least one day to be included in the analysis. APOT provided the evaluation team with data on 536 former residents (388 who entered through the Middle House and 148 who entered through the Jimmy House). IML provided data for 327 former residents.

5.2. Measures

Individual characteristics included age and years of education. Age of the APOT and IML residents was measured using a continuous variable and then coded as follows: 0 = up to 12 years old; 1 = 13-15 years old; 2 = 16-18 years old; and 3 = 19 years old and above. Years of education of resident was measured by using a continuous variable for number of years of formal education prior to program entry and coded as follows: 0 = no schooling; 1 = 1-3 years of schooling; 2 = 4-5 years of schooling; 3 = 6-8 years of schooling.

Institutional processes were measured by total length of stay across all entries, length of most recent stay, number of entries, and source of referral. *Total length of stay* across all entries was calculated by adding together the total number of days the child was in the program, and was coded as: 1 = one month or less; 2 = 1-3 months; 3 = 4-6 months; and 4 = more than six months. *Length of most recent stay* was measured by number of days during the resident's most recent stay. *Total number of entries* to the programs was coded as: 1 = once; 2 = twice; 3 = three times; and 4 = four to nine times. *Source of referral* to the APOT and IML programs were coded as: 1 = street educators; 2 = court or correctional

institutions; 3 = other residential program; 4 = friend, family, and joined on their own; and 5 = police.

Data collected for *Community Reinsertion Success* were based on responses to "Reasons for Leaving," which were recorded at the time the residents left the program. Response categories were not an exact match for the two programs since they recorded slightly different information at the time the children left the center; however, we were able to define success based on the categories of information collected. Specifically, *Community Reinsertion Success* was indicated by a dichotomous yes or no response, with 1 =Yes [reinserted with the family; independent living; employment, joining the Army, etc.], and 0 =No [left the program without permission; expelled/suspended; prison].

5.3. Data analyses

To answer *research question one*, we conducted a profile analysis using frequencies for each street children program. For *research question two*, community reinsertion success was defined by computing a percentage for each institution using a three-step process: 1) finding the sum of the number of former residents whose reason for leaving the institution indicated that they were on the road to successful reinsertion (e.g., to rejoin their families, live independently, join the Army, and/or begin working at a legitimate place of employment); 2) finding the sum of the number of former residents whose reason for leaving was other than those listed in step 1; and 3) dividing the step 1 result by step 2 result. Transfers to other residential programs were not considered a success or a failure and declared as "missing" cases.

The analyses to answer *research question three* consisted of an examination of the relationships between background characteristics, institutional processes, and successful reinsertion into the community using logistic regression and discriminant function analysis procedures. In these analyses, the community reinsertion success outcome (successful, not successful) was regressed on age, years of education, sources of referral, number of entries, and length of most recent stay. The APOT Middle House and Jimmy House samples were combined for these analyses.

Both logistic regression and discriminant function analyses were run to answer this research question because odds ratios are more interpretable for nominal/ordinal independent measures, and standardized DFA coefficients are more interpretable for interval and ratio independent measures. Logistic regression was run as the primary analysis, and discriminant function analysis was conducted in order to get a standardized/interpretable measure of the semi-partial effect of the independent measures on the dependent measure.

The odds ratio statistic that is produced by logistic regression indicates change in odds of community reinsertion success with a one-unit change in a specific predictor, holding constant other predictors. Therefore, an odds ratio value of 2.0 means that a one-unit increase in the predictor's value doubles the odds of success. Conversely, a value less than 1.0 indicates a decrease in the odds of success being presented with a one-unit increase in the predictor's value. Standardized discriminant function coefficients are reported, which represent the semi-partial relationship between each independent measure and the outcome when statistically controlling for all other independent measures. These coefficients are interpreted like correlation coefficients; however, the magnitude of discriminant function coefficients can only be interpreted relative to other coefficients in the equation.

6. Results of study

6.1. Street children profile

Research question one was posed to determine the individual characteristics of APOT and IML residents, source of program referral, and length of stay. Table 1 presents the frequency distributions of

Table 1	
Number and percentage of former APOT and IML residents by characteristics ('94-	-'99).

Individual	APOT (APOT (N=536)				IML (N=327)	
characteristics	Middle $(N = 38)$		Jimmy House (N=148)				
	N	%	N	%	Ν	%	
Age							
Up to 12	24	6	33	22	15	5	
13-15	128	33	46	31	186	57	
16-18	219	57	66	45	105	32	
19 and above	17	4	3	2	21	6	
Total N	388	100	148	100	327	100	
Years of education							
No schooling	100	26	12	8	0	0	
1-3	143	37	63	43	70	22	
4-5	102	26	42	28	197	60	
6-8	43	11	31	21	60	18	
Total N	388	100	148	100	327	100	

Note: APOT=Associação Promocional Oração Etrabalho at Brazil. IML=Instituto Mundo Libre at Peru.

individual characteristics of residents including age and number of years of formal education. For APOT, the results are divided into those street children who were at the Middle House and those who were only at the Jimmy House. It is important to note that while all residents went through the Jimmy House before reinsertion, those who entered the Middle House first (because of severe addiction and behavior problems) are referred to as Middle House residents in this paper. Those who entered the Jimmy House directly are referred to as Jimmy House residents. As the table shows, 72% (N = 388) of the total number of children who entered APOT entered through the Middle House, and 28% (N = 148) spent all their time at the Jimmy House. For IML, 327 street children had entered the program. The majority of APOT residents were 16-18 years old (57% at the Middle House and 45% at the Jimmy House), while the majority of IML residents was 13-15 years old (57%). A considerable percentage of residents in the APOT program had only 1-3 years of education (37% of Middle House and 43% of Jimmy House). The majority of residents for IML had only 4-5 years of education (60%) and an additional 22% had only 1-3 years of education.

Table 2 presents the frequencies for source of referral and program exposure measures, including number of program entries and total length of stay across entries. As the table indicates, street educators were the most common referral source for both the APOT (40% for Middle House and 56% for Jimmy House) and IML (39%) programs. Other residential programs referred a high number of children to APOT (38% for Middle House and 35% for Jimmy House), while a high number of children at IML entered the program on their own (30%).

In terms of total number of entries to the program, the majority of residents entered the program only once (76% for Middle House, 67% for Jimmy House, and 78% for IML). Length of stay was measured by total number of days across program entries. For APOT, the majority of Middle House residents had a total stay of less than one month (58%), while the majority of Jimmy House residents had a total length of stay of more than six months (57%). For IML, the majority of residents had a total stay of less than one month (54%).

6.2. Community reinsertion

Research question two was asked to determine the percentage of former residents of APOT and IML that were successfully reinserted into the community. Community reinsertion was considered to be successful if former residents left the APOT and IML programs to 1) live with their families, 2) live independently in the community, 3) work at a legitimate place of employment, or 4) if the resident was transferred to another institution that offers more opportunities to continue his development.

Table 2

Number and percentage of former APOT and IML street children by institutional processes ('94-'99).

Institutional processes	APOT				IML	
	(N=536)				(N=32	27)
	Middle House (N=388)		Jimmy House (N=148)			
	Ν	%	N	%	Ν	%
Source of referral						
Street educators	156	40	83	56	127	39
Court or institutes like FEBEM	64	17	8	6	43	13
Other residential program	149	38	52	35	NA	NA
Friend, family and others	19	5	5	3	16	5
Joined on their own	NA	NA	NA	NA	98	30
Police	NA	NA	NA	NA	43	13
Total number of entries to the	progra	m				
Once	295	76	100	67	254	78
Two times	64	16	31	21	46	14
Three times	19	5	10	7	10	3
Four times	4	1	4	3	12	4
Five times	4	1	3	2	3	1
Six times	2	1	-	-	1	-
Nine times	-	-	-	-	1	-
Total length of stay across all	entries					
A month or less	223	58	28	19	176	54
One to three months	68	17	25	17	41	13
Four to six months	50	13	11	7	30	9
More than six months	47	12	84	57	80	24

Note: APOT = Associação Promocional Oração Etrabalho at Brazil. IML = Instituto Mundo Libre at Peru. *Total length of stay* was calculated by adding together the total number of days the child was in the program.

Table 3 summarizes results of community reinsertion success across years for APOT and IML using the success criteria described in the previous section. Overall, the majority of the residents at APOT (56%) and IML (48%) were successfully reinserted into the community at the time they left the institution.

Table 4 shows the reasons for former street children leaving the APOT and IML programs. For APOT's Middle House residents, 49% were successfully reinserted with their families and 47% left without permission (i.e., ran away). Among those who left APOT's Jimmy House, 63% were successfully reinserted with their families and 24% left the program without permission. Upon leaving IML, 27% of the residents were successfully reinserted with their families, 19% left to live independently, and 47% left without permission.

6.3. Predictors of successful reinsertion

Research question three focused on predictors of community reinsertion success. Table 5 presents the results of the discriminate

Table	3		
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Percentage of former street children by community reinsertion success ('94-'99).

Reinsertion success ^a	APOT	IML		
	Middle House (N=383) ^b	Jimmy House (N=130) ^c	APOT total (N=513) ^d	(N=286) ^e
Yes No	50% 50%	72% 28%	56% 44%	48% 52%

Note. APOT = Associação Promocional Oração Etrabalho at Brazil. IML = Instituto Mundo Libre at Peru. Ns are in parentheses.

^a Success = Reinserted with the family, Independent living, or Employed.

^b Transferred to other institution = 3, missing = 1, died = 1, total n = 388.

^c Transferred to other institution = 16, missing = 2, total n = 148.

^d Transferred to other institution = 19, missing = 3, died = 1, total n = 536.

 $^{\rm e}$ Transferred to other institution = 5, missing = 1, died = 1, no records available = 34, total n = 327.

Table 4

Percentage of former APOT and IML street children: reason for leaving.

	APOT			IML
	Middle House $(N=386)^{a}$	Jimmy House (N=146) ^b	APOT Total (N=532) ^c	(N=291) ^d
Reinserted with the family	49.0%	63.0%	53.0%	27.0%
Working	0.3%	1.0%	0.4%	NA
Transferred to other institutions	1.0%	11.0%	4.0%	2.0%
Left the program without permission	47.0%	24.0%	41.0%	47.0%
Excluded	0.7%	0%	0.6%	0%
Prison	2.0%	1.0%	1.0%	0.7%
Left to live by himself	NA	NA	NA	19.0%
Joined Peruvian army	NA	NA	NA	1.0%
Judge asked him to leave the program	NA	NA	NA	0.3%
Suspended temporarily for misconduct	NA	NA	NA	0.7%
Expelled due to misconduct	NA	NA	NA	3.0%

Note: APOT=Associação Promocional Oração Etrabalho at Brazil. IML=Instituto Mundo Libre at Peru. Numbers in parentheses are sample sizes.

^a Missing = 1, died = 1, total n = 388.

^b Missing = 2, total n = 148.

^c Missing = 3, died = 1, total n = 536.

^d Missing = 1, died = 1, no records available = 34, total n = 327.

function and logistic regression analyses, including means, discriminant function loadings, standardized coefficients, and the logistic regression odds ratio values. Only statistically significant results are reported in Table 5.

There were several important predictors of reinsertion success. Length of most recent stay was found to be a significant predictor of APOT and IML reinsertion success. That is, the longer a resident stayed in the institution, the more likely he was successfully reinserted into the community. For APOT, the odds that community reinsertion success will occur are 3.7 times greater for residents who stay longer, and for IML, the odds of success are 1.9 times greater for residents who stay longer. Odds of success were 1.1 times greater for those residents who entered APOT with more formal education. Source of referral was also a significant predictor of APOT success. Residents of APOT referred from other residential institutions were 2.6 times more likely to be successfully reinserted, whereas those referred from correctional institutions were 5 times less likely to be successfully reinserted into the community. Referrals from street educators (the most common referral) did not significantly predict reinsertion.

7. Discussion of results

7.1. Street children profile

Most of the street children who entered APOT were between the ages of 16 and 18, and the majority of those who entered the IML program were between the ages of 13 and 15. The majority of APOT and IML residents had less than five years of formal education. Because of the adversities these children face, education is often not a priority. Instead of their formative years being spent in a learning environment with other children their age, these children are educated on the streets and they are only taught basic survival skills. Parents often do not have enough money to pay school fees for their children to attend school (Kombarakaran, 2004). Moreover, they often rely on their children to work in the streets and bring home money for the family for food and clothing, which makes school a luxury they cannot afford.

Since these children have so few years of education and so many barriers to receiving an education, it is essential that programs include educational components that provide basic reading and writing skills. Without the pressures of bringing home money and finding shelter and protection, children in these programs can focus on obtaining these necessary skills to become more resilient and better integrated into the working class of society. Research has shown that job training and study skills are the aspects of treatment programs that former street children enjoy the most because they desire reintegration into a more traditional lifestyle (Kudrati et al., 2008; Pare, 2004).

The large majority of the street children in both programs were referred by street educators or other residential programs. In very few cases, children were referred by family or friends. This is likely because street life has become commonplace in poor economies, and the dangers and issues related to a life on the streets are forgotten by those who live in that world (Milnitsky, 2006). Street educators or professionals play a large role in bringing useful information and skills to street children, helping to convince them that their participation in programs and utilization of services can help lead them away from drugs, deviant behavior, and extreme poverty (Kudrati et al., 2008; Mitchell, Nyakake, & Oling, 2007).

Table 5

Predictors of community reinsertion success: results of discriminant analysis and logistic regression.

Predictors	Means	Discriminant function loadings ¹	Discriminant function coefficients ²	Odds ratio
APOT (N=536)				
Length of stay at most recent entry (days)	21.1	0.7	0.7*	3.7*
Source of referral: correctional institutions	23.0	-0.5	-0.5^{*}	0.2^{*}
Years of education	2.5	0.5	0.4^{*}	1.1*
Source of referral: other residential programs	23.0	0.3	0.3*	2.6^{*}
Age	16.0	-0.2	_	-
Total number of entries	1.5	-0.0	_	-
Source of referral: street educators	30.0	-0.03	-	-
IML (N=327)				
Length of stay at most recent entry (days)	54.0	1.0	1.0*	1.9*
Years of education	4.3	-0.03	=	_
Age	15.4	0.1	-	-
Total number of entries	1.5	-0.1	_	
				-
Source of referral: street educators	35.0	0.2	-	-
Source of referral: street educators Source of referral: joined on their own	35.0 35.0	0.2 - 0.1	-	
				- - -

Note: ¹ = Bivariate correlation with institution success; 2 = Standardized canonical discriminant function coefficients; Logistic regression statistics using the Wald Test to determine level of significance. *p<0.05.

7.2. Reinsertion into the community

For both APOT and IML residents, the most common reason for successful reinsertion was to return to live with their families. Given the main age group for this population (13 to 18 years old), it is not surprising that most left to return to live with their families. That is, most of these children would not be prepared to live on their own and meet basic needs. Additionally, some children may be eager to get back to their families. Street children initially leave home for many reasons, which include supporting their families financially, feeding an addiction, or living with friends who make street life seem appealing (Kombarakaran, 2004; Plummer et al., 2007). These programs can help children get back to their families, drug-free, and with new skills that will enable them to acquire legitimate work or go back to school.

It is important to note that although children being reinserted to their families is considered a successful outcome, programs need to ensure that when children are sent back to live with their families, they are returning to safe homes where basic needs for food, shelter, and support are met. If the child's home life is filled with abuse and neglect, the child may return to the street (Kombarakaran, 2004; Lam & Cheng, 2008; Ribeiro, 2008). Programs should try to implement follow-up procedures, similar to the IML program, that ensure the adolescent is being cared for and is still drug-free. There should be systematic data collection of these follow-up visits, so that the continued success of these programs can be determined. Also, an assessment should occur at entry and before leaving the program to determine appropriate community reinsertion options.

For the IML program, another common reason for reinsertion was that the children left to live independently. It is likely that children who have been living in the streets for a long period of time become disconnected with their families and are unsure of whether returning home is a viable option (Kerfoot et al., 2007; Lam & Cheng, 2008; Orme & Seipel, 2009). Additionally, these former street children are likely better equipped with new skills and resources, and more likely to secure legitimate work than before program entry (Kombarakaran, 2004; Lam & Cheng, 2008). As mentioned in the program description, a key focus of the IML program was to equip these young boys with skills to live independently upon reinsertion.

Another common reason for leaving both programs was running away or leaving the program without permission. We do not have quantitative data to explain why these former residents left or where they went after leaving the program. However, staff members from both centers suggested that the children who drop out of these programs typically do so because of their addiction to drugs and desire to get high with friends. Also, those who leave the programs are often unwilling to follow rules and regulations, and they long for the freedom of the streets.

7.3. Predictors of successful reinsertion

Source of referral was an important predictor of reinsertion success, showing that those street children referred by other residential institutions were more likely to be successfully reinserted into the community. Street children referred by correctional institutions, however, were less likely to be successfully reinserted. It is possible that children referred by residential programs were more likely to be successfully reinserted because they had already sought support services and were trying to leave their life on the streets, whereas those referred by correctional institutions were forced to leave their lives on the streets and enter these programs against their will. Also, children referred by correctional institutions may have been higher-risk adolescents since they had been arrested for a variety of reasons, likely including drug use, theft, and other deviant behavior. Further, it is also likely that the reason children coming from other residential institutions fared better than others is because they benefited from more time to develop skills and become educated. Moreover, these children were off the streets for a longer period of time which enabled them to get sober and stay away from pressures from their peers or drug dealers.

Total length of stay was another important predictor for community reinsertion success, indicating that the longer one stayed in the program the more likely he was to be successfully reinserted into the community. This finding suggests that the services provided during the child's stay play a large role in the child's ability to be reinserted into society. This finding is consistent with research findings that consistently demonstrate that the length of time in drug abuse treatment is one of the most important predictors of successful drug abuse treatment outcomes (Condelli & Hubbard, 1994; Gerstein & Harwood, 1990; Gossop, Marsden, Stewart, & Rolfe, 1999; Zhang, Friedmann, & Gerstein, 2003).

A third and final predictor of reinsertion success was that street children who had more formal education had a slightly greater chance of successful reinsertion. Farrow et al. (1992) state that because homeless children drop out of school during their early teens, they are unable to develop necessary skills for securing and maintaining employment. It makes sense that those who had received more education before becoming homeless were more likely to be successfully reinserted into society, as they were better equipped with necessary skills and knowledge.

8. Study limitations

- Our analysis is based on record data that was collected by program personnel prior to when our study began. While program staff seemed confident that the data had been recorded and coded consistently for all residents, we were unable to independently confirm the reliability of the data.
- There was no record-keeping related to follow-up or tracking of former residents to find out whether the outcomes reported by the program staff were accurate. Additionally, we do not know whether the outcomes reported were sustained for some period of time.
- We also do not have data on whether the children who came to these programs were from abusive households or whether alternative options for reinsertion were considered or available for these situations. The reinsertion data would be more informative in terms of success if it would have provided information on whether the children were returning to homes that were able to provide for them and were not physically, sexually, or verbally abusive. However, we do know that IML's program staff discouraged residents from returning to abusive homes and taught them necessary skills to live on their own.

9. Conclusion and future research

The results of this study suggest that the APOT and IML programs achieved their program goals and objectives in terms of successful reinsertion of street children into the community. Although Dybicz (2005) states that residential or rehabilitative programs such as this have been criticized because successful reintegration tends to be low, our study found contrasting results. Overall, 56% of the residents at APOT and 48% of those at IML were successfully reinserted into the community at the time they left the institution. Quantitative evaluation of street children programs and related outcomes is rare and we were, therefore, unable to compare these findings with similar outcome studies cited in the literature.

The programs' success may be due to the fact that these programs utilized evidence-based substance abuse treatment approaches that were adapted to meet the perceived needs of street children. Recognizing that street children may be engaged in criminal behavior and are at risk of becoming chemically dependent, staff at APOT and IML offered these street children an opportunity to participate in a social, therapeutic, and educational process in a residential setting. Participating in such a process helps prepare the residents for reinsertion into the community, equipping them with education, knowledge of resources, and skills they would not have otherwise. Ferguson et al. (2006) state that "programs that can provide multiple services (e.g., food, shelter, education, skills, training, religious teaching and health care) will ultimately have a greater impact on keeping youth off the streets and preparing them for adulthood" (p. 1526).

The current research is a departure from most prior street children research that has focused on describing the street children population and challenges they experience (Kerfoot et al., 2007; Kudrati et al., 2008; Plummer et al., 2007). Relatively little attention has been given to evaluating the effectiveness of street children programs (Ferguson et al., 2006; Nabors et al., 2003). In an extensive review of the literature on street children programs, Wittig et al. (1997) concluded: "Funding for evaluations of projects and programs serving street children is virtually non-existent, as funding for the programs themselves has become tighter" (p. 823). Dybicz (2005) further adds-over 10 years later-that research continues to focus on describing the population and that there is a great need for empirical research to help determine best practices, ranking the importance and impact of program components in terms of efficacy. Karabanow and Clement (2004) contend that the dearth of knowledge regarding the effectiveness of these programs is due, in part, to the lack of outcome measures for these programs. The current study attempts to move the field forward by assessing reinsertion outcomes from two model street children programs.

Based on the results of the current study, it is important for programs to provide beneficial services and educational opportunities for street children so that they will be motivated to stay in such programs for longer periods of time (Kombarakaran, 2004; Lam & Cheng, 2008; Pare, 2004). Since these children receive provisions from the programs, there is less pressure to bring home money and there is more time to obtain an education. Program developers may want to consider what skills and education street children need in order to be successfully integrated into society (e.g., vocational skills, reading and writing, drug refusal skills) and ensure that this education is a primary goal of their programming. Interventions should also try to include parents and relatives of these children to ensure that the entire family is provided with the services and support they need to become healthy and obtain necessary skills (Nabors et al., 2003).

In conclusion, while this study provides a stepping-stone for evaluation of street children programs, it is evident that further evaluation needs to be conducted so that progress can be made in terms of what constitutes an effective intervention for this population. After decades of describing this population, attention needs now to be paid to evaluating these programs (Dybicz, 2005; Wittig et al., 1997). Further, evaluation should occur continuously so that program components that are ineffective can be adapted or omitted and resources can be spent on components shown to work with this population. Since education appears to be an important component in these programs, evaluations should assess what is actually being learned in the programs in terms of educational objectives and work skills. Research is needed that would document the experiences of all residents in a program over a period of time and would follow up with the children after they leave to determine lasting outcomes and their relationship with exposure to program services including counseling, education, and job skills.

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