On the Lifetime Prevalence of Running Away from Home

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Running away from home puts youth at risk of violence, crime, drugs, prostitution, HIV and other STDs, and other health problems. Youth who have run away from their home demonstrate high rates of delinquent and problem behaviors, including substance abuse (Johnson, Whitbeck, and Hoyt 2005), truancy (De Man 2000), gang involvement (Yoder, Whitbeck, and Hoyt 2003), criminal activity (Hammer, Finkelhor, and Sedlack 2002), and juvenile arrest (Kaufman and Widom 1999). Runaway youth are not only likely to perpetrate crimes and engage in delinquent behaviors, they are also likely to have been victimized at home (Tyler, Cauce, and Whitbeck 2004; Thompson, Zittel-Palamara, and Maccio 2004; Kurtz and Kurtz 1991) and to experience additional victimization once they leave home.

Estimates of the runaway population are difficult to obtain and the exact number of runaway youth is not really known (Greene, et al. 2003). Several studies have attempted to estimate the number or percentage of youth who have run away from home in the previous year, with estimates ranging widely from 1.6 million to 2.8 million.

Another important measure of runaway behavior is lifetime prevalence, that is, the percentage of youth who ever run away from home. Identifying lifetime prevalence is important for understanding the causes and consequences of running away, yet little is known about lifetime runaway prevalence. The most often cited study by Nye and Edelbrock (1980) estimated that one in eight youth runs away before the age of 18, but that study infers estimates from a cross-sectional survey intended to generate a one-year incidence measure using data collected in 1976.

One confounding problem in understanding the size of the runaway population is that runaway experiences among youth tend to be episodic rather than chronic (Robertson 1991). Since most studies focus on a one-year reference period, little is known about to what extent youth have multiple runaway episodes. Multiple episodes may distort the estimates of lifetime prevalence that are based on a single cross-section survey. Furthermore, studies focused on one year do not capture the age at which youth first ran away, an important factor in understanding the phenomenon.

In this paper, we exploit a useful data set, the National Longitudinal Survey of Youth, 1997 cohort (NLSY97), to develop three measures not generally found in the literature. First, we estimate the percentage of youth who run away from home before the age of 18, that is, "lifetime" prevalence. Second, we estimate the distribution of the number of times youth run away before age 18, and finally, we estimate the age at which these youth first run away.

In the next section, we review the various estimates of runaway incidence. After describing the NLSY97 data set, we present estimates of the percentage of youth who have ever run away, the number of times they've run away, and the age at which they first ran away. We then conclude with a discussion of how these estimates help inform about runaway behavior.

Estimates of the Incidence of Running Away from Home

According to the Second National Incidence Studies of Missing, Abducted, Runaway, and Thrownaway Children (NISMART-2), perhaps the most widely cited source on incidence, approximately 1.7 million youth ran away or were thrown away in 1999

(Hammer, Finkelhor, and Sedlack 2002). This translates into approximately 6.9 percent of youth ages 12 to 17 at that time. The NISMART-2 was designed specifically to estimate the incidence of running away and included household telephone interviews with parents and youth as well as youth in juvenile facilities. Running away was defined as when a child leaves home without permission and stays away overnight; a child 14 years or younger who is away from home chooses not to come home when expected to and stays away overnight; or a child 15 years old or older who is away from home chooses not to come home and stays away two nights (Hammer, Finkelhor, and Sedlack 2002).¹

Using the 1992 Youth Risk Behavior Survey (YRBS), Ringwalt et al. (1999) estimated approximately 7.6 percent of 12- to 17-year-olds having at least one night in one of six homeless situations during the previous 12 months. This measure involves a stronger definition of being away from home than the NISMART-2 as the six situations capture riskier environments than many runaways may encounter, thus underestimating the total number of runaways. Furthermore, the YRBS derives its sample in schools, which could lead to an underestimate of running away as runaways are less likely to be in school on any given day. On the other hand, the YRBS measures all types of youth homelessness, some of which may not involve running away, such as family homelessness, which would lead to an overestimate of runaways.

Sanchez et al. (2006) used the first two in-home waves of the National Longitudinal Survey of Adolescent Health (Add Health) and estimate that 6.4 percent of

¹ The NISMART-2 also included throwaway episodes, defined as when a child is asked or told to leave home by a parent or other household adult or a child is prevented from returning home by a parent or other household adult, no adequate alternative care is arranged for the child, and the child is out of the household overnight (Hammer, Finkelhor, and Sedlak 2002).

12- to 17-year-olds had run away in the past 12 months. Unlike the NISMART-2 or the YRBS, the Add Health questionnaire did not define what is meant by running away. Although Sanchez and colleagues used the in-home waves of the survey, the original sample was derived in schools and thus has the same potential underestimation as the YRBS.

The 2002 National Survey on Drug Use and Health (NSDUH), a household-based survey, indicates approximately 7 percent of youth age 12 to 17 had run away from home and slept on the street in the past 12 months (SAMHSA 2004). Despite appearing to be a similar estimate to other studies, the condition that the youth had to sleep on the street is a strong condition. This implies a much higher estimate would have resulted from the NSDUH if its definition was as expansive as other studies.

Data

All of these estimates are based on a single 12-month reference period. To measure the prevalence of running away from home over the lifetime (that is, until reaching the age of majority), we use data from the National Longitudinal Survey of Youth –1997 (NLSY97). Sponsored by the U.S. Bureau of Labor Statistics, the NLSY97 follows a nationally representative household-based sample of youth born in the years 1980–1984 who were 12 to 18 years old when first interviewed in 1997/1998. The baseline sample of nearly 9,000 youth includes oversamples of African-American and Hispanic youth. Annual follow-up interviews have been conducted with high sample retention. In the eleventh round, 82.6 percent of the baseline sample was interviewed.²

² Downloaded from <u>http://www.nlsinfo.org/nlsy97/nlsdocs/nlsy97/97sample/rni.html on 12/24/09</u>. For an overview of the NLSY97, see Bureau of Labor Statistics (2005) and Michael and Pergamit (2001).

The NLSY97 focuses on labor market behavior, the behaviors and activities that influence it, and the behaviors and activities it influences. Consequently, the NLSY97 includes a wide array of information on many topics. Complete histories are collected on employment, education, marriage, pregnancies, and fertility. Youth are asked about their cigarette use, alcohol use, and drug use; delinquency and criminal behavior; sexual behavior; health; various attitudes and expectations; participation in government income transfer programs (e.g., TANF, Food Stamps); and income and assets. Other specialized topics are covered in various years.

With funding provided by the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the NSLY97 includes questions about running away from home.³ In 1997, the baseline year of the NLSY97, all youth were asked if they had ever run away from home, defined as *staying away at least one night without their parents' prior knowledge or permission*. This is a subset of the conditions specified in the NISMART-2, albeit the most significant condition. Youths who had ever run away were asked how many times they had run away and the age at which they first ran away. In subsequent years, youths residing with parents or guardians and under 17 at their previous interview were asked if they had run away since their previous interview date. If yes, they were asked how many times.

The NLSY97 may underestimate runaway episodes for several reasons. It potentially misses the most serious runaways who are not connected to a household and may be difficult to find in follow-up interviews. The size of this problem is likely small. The NISMART-2 indicates that long-term runaways are a very small percentage of all

³ OJJDP funding also covered questions on alcohol and drug use, delinquency, crime, arrest, and incarceration.

runaways. Toro, Dworsky, and Fowler (2007) note that a longitudinal study of homeless youth initially ages 12 to 17 found 93 percent of the sample were no longer homeless after 4.5 years; a third were living with their parents. Milburn et al. (2007) found 70 percent of new runaways in Los Angeles returned home within two years.

The structure of skip patterns in the NLSY97 also may lead to underestimates of running away. Each follow-up year, the questionnaire does not ask the questions about running away to youth who had been 17 at the previous interview or to those not living with parents or guardians at the current interview. The former exclusion may cause us to miss runaway episodes between the interview at age 17 and the youth's 18th birthday. The latter exclusion may miss youth who are not living with parents or guardians because they ran away. Guardians include grandparents, but do not include other caregivers, such as aunts and uncles, resulting in missed runaway episodes that occur while living with caregivers other than parents or grandparents.

Finally, the NLSY97 questions explicitly refer to running away and thus miss those youth who are thrown out of their home or who were pushed out by their parents. However, it is difficult to say how many episodes would be missed as these concepts overlap and the categories are not mutually exclusive (Greene et al. 2003).

In general, the NLSY97 provides a useful resource for estimating runaway episodes (Tyler and Bersani 2008). As a prospective survey, the NLSY97 allows us to observe the entire period of adolescence. We observe most youth before their first runaway episode and over time may observe multiple runaway episodes.

To consider how well the NLSY97 performs in estimating the percentage of youth that run away, we create an incidence measure to compare with the estimate from the

NISMART-2 (the survey with the closest definition of running away). Using the 1998 survey of the NLSY97 and including youth age 13 to 17, the first year when a one-year reference period is available, we find approximately 7.8 percent had run away in the previous year. These estimates are similar to the NISMART-2 which found 6.9 percent of 12- to 17-year-olds ran away in 1999. The higher rate in the NLSY97 could reflect the absence of 12-year olds in the estimate, who likely have lower rates; differences in mode of data collection (in-person versus telephone interviewing); or a myriad of other differences including sampling error. However, the two surveys give similar enough estimates to believe that the NLSY97 does an adequate job of estimating the percentage of youth who run away per year, especially given that the NLSY97 rates are also similar to the YRBS, Add Health, and NSDUH estimates cited above.

Analytical Sample

We limit our analyses to the 1,168 youth who were age 12 at the baseline interview in 1997. This selection reduces the likelihood of recall error and other response errors that may occur with older adolescents. It also minimizes the likelihood of excluding youth who may have run away and are not in a household in 1997. The age restriction will allow us to observe most youth before a runaway episode occurs and follow them annually to observe whether or not they had run away through age 18.⁴

Like any longitudinal survey, the NLSY97 has attrition; however, the NLSY97 allows respondents to return to the sample after having missed interviews. By asking

⁴ Note, though, that 5.2% of sample youth had already run away before the first interview, approximately three-quarters who report running away before turning 12.

about behaviors since the previous interview date, histories are filled in. This allows us to capture all runaway episodes that end with a return home.

To measure the number of times a youth ever ran away, we cumulate the reports from each wave of the survey. For youth for whom we do not have complete histories, this will underestimate the total number of runaway episodes.

Finally, we capture the age at which the youth first ran away in one of two ways. If the youth had run away as of the first interview, they are asked explicitly how old they were the first time they ran away. For youth whose first runaway episode occurred at a later wave, we average their current age in months, with their age in months at the last time they were interviewed. It is unlikely that this will bias the estimates in any particular direction.

Estimating the Prevalence of Running Away from Home

We first estimate the lifetime prevalence of running away, using youth who responded in all years to the question about running away. For this restrictive sample, the weighted prevalence estimate indicates that 19.0 percent of youth ran away before turning 18 years old. This rate is higher than might be expected based on one-year incidence measures and much higher than the Nye and Edelbrock (1980) estimate.

To identify the potential impact of attrition, we calculate the prevalence of running away for youth who answered the question at an interview when they were age 17, and thus filled in their past history; and then again, counting anyone who had ever told us they had run away (though some may have dropped out of the survey at a subsequent year). These weighted estimates are 19.5 and 19.4 percent, respectively. The

estimate requiring answering the question every year is the lowest, likely reflecting higher attrition among youth who run away from home. The other two estimates are similar to each other. For the purpose of this paper, we will use the estimate that counts everyone who has ever told us they ran away (19.4 percent). This estimate is conservative because it counts as not running away any youth who is never interviewed after their first runaway episode and thus never reported a runaway episode.

Using this definition, table 1 shows estimates of rates of running away by raceethnicity and sex. Females show higher rates of running away than males (20.6 versus18.3 percent). Blacks have the highest rates (21.9 percent) and show only small differences by sex. Whites have the next highest rates (19.1 percent) with females having more than a 2 percentage point difference over males. Hispanics have lower rates than either blacks or whites (14.7 percent) and more substantial sex differences with Hispanic males having a rate of only 12.6 percent, much lower than any other group. The "other" group is a mixture of youth who did not identify themselves as Hispanic, white, or black. Although its sample size is quite small (unweighted n = 43), the high rates shown for this group are statistically significantly different from the other groups.

	Non-Hispanic	Hispanic	Non-Hispanic	Non-Hispanic	Total
	black	(n = 254)	white	other	(n =
	(n = 296)		(n = 575)	(n = 43)	1,168)
Male (n =	21.4	12.6	18.0	26.5	18.3
603)					
Female (n	22.5	17.0	20.2	28.7	20.6
= 565)					
Total	21.9	14.7	19.1	27.6	19.4

 Table 1. Weighted Rates of Ever Running Away by Race-Ethnicity and Sex in the NLSY97

As noted, running away tends to be episodic with most youth returning home. The longitudinal nature of the NLSY97 allows us to calculate the total number of runaway episodes for each youth. Youth who ran away did so an average of 3.2 times (table 2); however, the distribution is quite skewed. About half of all runaways have only one runaway episode and return home. One-fifth (21.7 percent) run away only twice, while nearly 17 percent run three to five times. About an eighth (12.6 percent) of those who ran away did so more than five times.

In addition to being more likely to run away, females run away more times than males. Only 43.4 percent of males who ran away did so more than once compared to 57.6 percent of females. On average, females ran away 3.7 times compared with 2.7 times for boys. Differences by race-ethnicity were small, with each group having a similar percentage that ran away more than once.

Times ran away by age 18	All youth	Male	Female	Non- Hispanic black	Hispanic	White
Mean	3.2	2.7	3.7	2.5	2.8 ^a	3.0
1	48.8	56.7	41.4	48.0	50.4	52.4
2 3–5	21.7 16.9	17.2 17.4	25.9 16.4	30.8 14.1	18.1 15.3	17.4 17.1
6–10	7.7	5.8	9.6	3.3	10.4	9.3
11+	4.9	3.0	6.7	3.9	5.8	3.7

Table 2. Percent Distribution of Number of Times Run Away by Age 18 in theNLSY97 for Those with at Least One Runaway Episode

a. Excludes two very large outliers.

Surveys that estimate one-year incidence rates calculate the age distribution of those who ran away that year. Not surprisingly, the bulk of runaways in a given year are

older adolescents. For example, the NISMART-2 found two-thirds (68 percent) of all runaways were ages 15 to 17 (Hammer, Finkelhor, and Sedlak 2002). However, this gives a distorted view of when youth begin running away from home.

Table 3 shows the approximate distribution of the age of first running away. Most youth who run away begin doing so at young ages. Just over half of all runaways have their first runaway episode before turning 14 years old. Recall that the questionnaire design may have caused us to underestimate first runaway episodes that occur at age 17; however, the bulk of first runaway episodes occur in the early teen years.

Males are more likely than females to have their first runaway episode before age 13. Females have a big spike at age 13 and nearly catch up with males with both sexes having over half of all first runaways before age 14. Whites tend to run away at slightly earlier ages than blacks and Hispanics, with Hispanics noticeably having their first runaway episode in the later teen years. Over half of all Hispanic youth who run away do so after turning 15, a much higher rate than either whites or blacks.

Age at first run	All youth	Male	Female	Non- Hispanic	Hispanic	White
Before age	22.7	29.9	15.8	19.1	12.6	23.1
12	22.7	27.7	15.0	17.1	12.0	23.1
12–13	28.7	22.7	34.5	30.6	19.6	29.8
14–15	32.3	29.8	34.6	32.7	35.6	33.4
16–17	16.3	17.4	15.2	17.6	33.1	13.8

 Table 3 Age at first run away episode in the NLSY97

Discussion

Most attempts to estimate the runaway population have focused on incidence rates of youth running away in the prior year. This paper adds to our knowledge of running away by estimating three measures not found in the literature: the prevalence of lifetime running away, the number of runaway episodes, and the age at which youth first run away.

Using a nationally representative longitudinal data set that follows youth from age 12, we find that nearly one in five ran away before age 18. The limitations of the data set imply that our estimates are likely lower bounds. Females were more likely to run away from home than males and do so more often. However, males are more likely than females to have run away before the age of 12. Hispanics, particularly Hispanic males, were much less likely than whites or blacks to ever run away from home. Hispanics are also much less likely to run away at young ages (before age 14).

The substantial portion of youth who will at some time run away suggests it is important to understand the causes and consequences of running away and how those might differ across youth. Most studies of runaway youth use samples of youth from homeless shelters, other service providers, or found on the street. These samples may differ from the runaway population in general (Smollar 1999).

Studies that use cross-sectional data, such as the incidence studies cited earlier, may not capture effectively the process or predictors of running away. For example, we find that half of all runaways return home and never run away again, while the other half have multiple runaway episodes. These likely represent two types of youth or two types of family processes. Similarly, females have more runaway episodes than males, perhaps reflecting gender differences in interactions within families.

Finally, Cauce (2000) suggests that the pathway to the streets may be different for children who leave home at different ages and that interventions that might help potential

runaway youth might differ by the youth's age. We estimate that the first runaway episode occurs much earlier than might be inferred from incidence studies where most runaways are in their later teens. In fact, half of all youth who ran away had their first runaway episode before the age of 14, with males starting at younger ages than females.

In general, these estimates reveal a heterogeneous population in terms of their runaway histories. However, what is important to recognize is that most runaway and homeless youth have histories of runaway (and throwaway) episodes. When we observe that most runaway youth are older adolescents, we must bear in mind that we are observing them after perhaps years of time spent couch surfing and/or living in precarious situations. This period may have followed a long period of family conflict, abuse, and neglect. Helping these youth requires taking into consideration these histories in tailoring services to meet their needs. The estimates also suggest that prevention may be an important factor that should receive greater emphasis.

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