FAMILY CHARACTERISTICS AND RUNAWAY YOUTH

A panel study conducted on behalf of the National Runaway Safeline examining the correlations between family level variables and runaway behavior by adolescents using crosstabs and multiple logistic regression.

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EXECUTIVE SUMMARY

The goal of this study is to examine the connection between family characteristics and runaway behavior. Only a few family level variables have been examined in prior research with most studies focusing on parental abuse. This study seeks to expand the range of family level variables under examination. The study uses a nationally representative panel survey to identify the correlations between family characteristics at time one and the measure of runaway behavior for the same adolescents at time three. This analysis considers four kinds of family variables; stability, abuse, quality of parent-child relationship, and parent characteristics. Crosstab analysis using chi squares was used to pinpoint correlations between family level variables and runaway behavior. These results guided variable selection for the multiple logistic regression models which give a broader picture of all significant family level variables in one model. The results of this study offer compelling evidence that running away from home as an adolescent is strongly connected with family characteristics.

Multiple Regression Model Highlights

- Parents who binge drink, defined as five or more drinks in one setting, three or more times per month, have kids that are more than twice as likely to run away from home compared to parents who never binge drink.

- Parents who report that they get along well with their children and those that report high levels of trust in their kids have children with lower runaway rates.

- Youth who have been in foster care are over 2.5 times more likely to run away than those who have not.

- Youth who have been physically, mentally, or sexually abused are more likely to run away from home compared to those who have not been abused (40 percent more likely, 40 percent more likely, and 30 percent more likely, respectively).

- Youth whose parents have had to leave them for six or more months are 60 percent more likely to run away compared to other youth.

Chi Square Model Highlights

- Parental marital status, education level, and use of public assistance were all significantly connected to runaway rates in the chi square models but when included in the large regression model the effects were no longer significant.

- A number of indicators of parent-child relationship quality also were significant in the chi square models but not in the regression. These variables include: if the parent and child make decisions together about the child's life, if the parent feels they do not understand their child, and if the parent feels that their child interferes in their activities.

The Risk Amplification Model (RAM) argues that unhealthy factors in a youth's environment including abuse and family instability put youth at risk for running away from home later in life. When the youth runs away from home, that risk is further amplified due to the pressures of surviving on the street which increases the risk of negative outcomes among such youth later in life (Cauce et al., 2000; Whitbeck & Hoyt, 1999).

At the family level, correlations with runaway behavior have been found for individuals abused or neglected by parents or guardians, for youth with parents who abuse alcohol, and for youth with a lack of parental support. A great deal of evidence is available that links prior abuse with runaway behavior. A study by the National Incidence Studies of Missing, Abducted, Runaway, and Throwaway Children using the National Household Survey of Youth found that 21 percent of runaways had been physically or sexually abused before leaving home or were afraid of abuse upon return (Hammer, Finkelhor, & Sedlak, 2002). An analysis of youth in shelters found that 30 percent report previous physical abuse (Thompson & Pollio, 2006). A number of studies have found that abuse rates are higher for runaways than non-runaways (Cohen, MacKenzie, & Yates, 1991), (General Accounting Office, 1989), (Powers, Eckenrode, & Jaklitsch, 1990), (K. A. Tyler & Cauce, 2002), (Molnar, Shade, Kral, Booth, & Watters, 1998).

However, abuse is not the only possible family level predictor of runaway behavior. In 2012, 29 percent of crisis callers to the National Runaway Safeline identified family dynamics as a problem for them (Benoit-Bryan, 2013). The strongest predictors of running away found by one study was parental alcohol abuse (Van Houten & Golombiewski, 1978). A longitudinal study conducted in 2011 by Tucker et al found that a lack of parental support was a significant predictor of runaway behavior in youth (Tucker, Edelen, Ellickson, & Klein, 2011). On the flip side, positive parenting as measured by parental monitoring, closeness and overall relationship with parent, leads to a statistically significant decrease in runaway episodes and an increase in school engagement (K. Tyler, Johnson, & Brownridge, 2008).

Previous research has highlighted the serious, detrimental long term outcomes of runaway behavior as an adolescent including lower wages, lower education level, higher arrest rates, lower health ratings, higher suicide levels, and greater dependence on public assistance (Benoit-Bryan, 2011). The severity of these outcomes warrants additional research into the policy arenas where intervention and runaway prevention are possible. Understanding the family characteristics that are related to runaway behavior is an important step to untangling the complex causes of running away from home and being able to leverage policy to effectively reduce adolescent runaway behaviors and the long-term harms associated with them.

The data used in this study are from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative sample of over 15,000 adolescents who were followed into adulthood with four longitudinal interview points. The study used a clustered school sampling design of adolescents in grades 7-12 during the 1994-1995 school year. These same participants were re-interviewed for wave two of the study during the 1995-1996 school year. This core in home sample is essentially self-weighting and consists of a nationally representative sample of 12,105 American adolescents in grades 7 through 12 (Mullan Harris, 2005).

The Add Health sample design is a school based sampling framework. Using the Quality Education Database a stratified sample of 80 schools (designated as high schools by including an 11th grade and having more than 30 students) was selected with probability of selection relative to size. Schools were stratified according to urbanicity, school type (public, parochial, private), ethnic mix, size, and region. A feeder school (usually a middle school) was selected for each high school resulting in a school pair in each of 80 different communities. More than 70 percent of schools originally included in the sample agreed to participate in the study. To fill out the sample, additional schools were selected within each stratum until a school (or school pair) was found who agreed to participate. If a school spanned grades 7 through 12, no feeder school was selected, resulting in a final sample of 132 schools.

Seventy-nine percent of the students selected in the first wave of the survey completed survey responses. Data collection for all four in home waves of the survey were conducted with audio computer assisted technology with sensitive items being self-administered and less sensitive material being interviewer administered. The second wave in home interview was completed in 1996 with the adolescents who were in grades 7 through 11 at wave one of the survey (N=14,738). Students who were in grade 12 at wave one of the survey were not included in the sampling frame for wave two, all respondents were under age 18 at the time of the second wave interview.

METHODOLOGY

This study examines the correlation between family level characteristics measured at wave one of the study and lifetime runaway behavior for individuals measured at wave three of the survey.

This analysis considers four kinds of family variables; stability, abuse, quality of parent-child relationship, and parent characteristics. Family stability is measured with three items, parent marital status, if the parent has ever lived away from the child for six months

or more, and if the child has ever been in foster care. Three abuse variables are included in the model; verbal, physical, and sexual. Abuse variables are measured as abuse committed by a parent or guardian before the child turned 18. The quality of the parent-child relationship is measured with five variables; how well the parent and child get along, if the parent and child make decisions together about the child's life, if the parent feels they do not understand their child, if the parent really trusts their child, and if the parent feels that their child interferes in their activities. Finally, four additional variables concerning parent characteristics are measured including if they are on public assistance, their birthplace, their education level, and the frequency with which they binge drink (five or more drinks in a setting per month).

Crosstab analysis with chi square estimates was used to measure differences in runaway rates by family characteristics. Multiple logistic regression was used to build a model with all of the significant family level characteristics to identify the overall correlations at the family level. A number of demographic variables were controlled for in the regression model including gender, race, and sexual orientation of the child. The variables selected for inclusion were found to be significant predictors of runaway behavior in previous research (Benoit-Bryan, 2011).

This analysis identifies family characteristics that are related to runaway behavior. Statistically significant findings were those at p<.10 indicating that the probability of the results occurring by chance is less than 10 percent. We also report the Pearson chi square values which are used to assess the magnitude of the differences between the groups and can be compared across tables.

FINDINGS

The first set of crosstabs analyzes the correlation between runaway rates and family stability. We find that there are statistically significant differences in runaway rates for children based on whether or not their parent is married, children with a parent who is married are less likely to run away from home than those with a parent who is not married. In addition, if the parent has had to live apart from the child for six months or more the likelihood of running away more than doubles from 7.5 percent to 16.6 percent. The relationship between runaway behavior and foster care history is even larger with 8.1 percent of children not in foster care running away while 30.7 percent of children who have been in foster care ran away at some point in their lives. Clearly, family stability is highly connected with runaway behavior (see Table 1).

Table 1 – Crosstab Analysis of Three Family Stability Indicators and Runaway Indicators

Model One	Have you ever run away from home?			
Parent is married		No	Yes	Chi Square
	No	90.3%	9.7%	9.319**
	Yes	92.0%	8.0%	
Model Two	**Have you ever run away from home?**			
Parent has been away from child for 6 months or more		No	Yes	Chi Square
	No	95.5%	7.5%	129.496***
	Yes	83.4%	16.6%	
Model Three	**Have you ever run away from home?**			
		No	Yes	Chi Square
Child has been in foster care	No	91.9%	8.1%	28.558***
	Yes	69.3%	30.7%	

Significance Level * p<.10, ** p<.05, *** p<.01

The next set of analyses examines the relationship between abuse by a parent or guardian and runaway behavior. We find that all three types of abuse; verbal, physical, and sexual, are statistically significant in correlations with lifetime runaway behavior. The effect sizes are larger for physical and sexual abuse than verbal abuse with an increase in runaway rates of 11.1 percent for individuals who have been physically abused, 9.1 percent for those who were sexually abused and 6.4 percent for those who were verbally abused (see Table 2).

Table 2 – Crosstab Analysis of Abuse by a Parent or Guardian and Runaway Indicators

	Have you ever run away from home?			
BEFORE AGE 18...		No	Yes	Chi Square
Were you verbally abused?	No	94.7%	5.3%	171.727***
	Yes	88.3%	11.7%	
	No	93.7%	6.3%	307.115***

Were you physically abused?	Yes	82.6%	17.4%	
	No	92.1%	7.9%	66.855***
Were you sexually abused?	Yes	83.0%	17.0%	

Significance Level * p<.10, ** p<.05, *** p<.01

The third group of chi squares shows the correlation between lifetime runaway rates and indicators of the quality of the parent/child relationship. All five indicators of relationship quality have statistically significant correlations with lifetime runaway rate. The largest gap in runaway rates by quality of life is in parental trust. Children of parents who report that they always trust them have runaway rates that are five times lower than the children of parents who report that they never trust their children (4.9 percent and 27.0 percent, respectively). There are also large gaps in runway rates for children of parents who report that they get along well with their child from a rate of 15.2 percent who never feel this way to only 5.5 percent for parents who always feel this way. Parents who report that they always make decisions with their child about their child's life have children who run away at much lower rates (6 percent) compared to parents who never do this (18.4 percent). Parents who feel that they do not understand their children more often have children who are more likely to run away from home as do parents who report that their children interfere with their activities (see Table 3).

Table 3 – Crosstab Analysis of Indicators of Parent-Child Relationship Quality and Runaway Indicators

Model One	Have you ever run away from home?			
How often do you feel…		No	Yes	Chi Square
You get along well with your child	Never	84.8%	15.2%	167.678***
	Seldom	78.4%	21.6%	
	Sometimes	85.2%	14.8%	
	Often	90.8%	9.2%	
	Always	94.5%	5.5%	
Model Two	Have you ever run away from home?			
You and your child make decisions	Never	81.6%	18.4%	125.095***
	Seldom	83.5%	16.5%	
	Sometimes	89.3%	10.7%	

together about their life	Often	92.4%	7.6%	
	Always	94.0%	6.0%	
Model Three	**Have you ever run away from home?**			
You do not understand your child	Never	94.0%	6.0%	72.763***
	Seldom	93.1%	6.9%	
	Sometimes	90.3%	9.7%	
	Often	87.1%	12.9%	
	Always	88.9%	11.1%	
Model Four	**Have you ever run away from home?**			
You really trust your child	Never	73.0%	27.0%	405.371***
	Seldom	74.2%	25.8%	
	Sometimes	84.8%	15.2%	
	Often	90.4%	9.6%	
	Always	95.1%	4.9%	
Model Five	**Have you ever run away from home?**			
Your child interferes in your activities	Never	92.7%	7.3%	41.790***
	Seldom	90.7%	9.3%	
	Sometimes	88.3%	11.7%	
	Often	88.1%	11.9%	
	Always	89.3%	10.7%	

Significance Level * p<.10, ** p<.05, *** p<.01

The last set of family level indicators includes parental characteristics such as income, birthplace, education level, and alcohol consumption habits. Parental birthplace was not a significant predictor of lifetime runaway behavior. The children of parents who are using public assistance have higher runaway rates than those who are not on public assistance (11.3 percent versus 8.2 percent). Higher parental education levels are generally connected to lower runaway rates for their children although the relationship is not entirely linear. There is a clear, linear relationship between frequency of parent drinking five or more drinks in one setting during a month and runaway behavior. Parents who report never drinking five or more drinks in one setting in the past month have children with runaway rates of 7.9 percent while those who report binge drinking three or more times a month have children with runaway rates of 14.4 percent (see Table 4).

Table 4 – Crosstab Analysis of Parent Characteristics and Runaway Indicators

Model One	Have you ever run away from home?			
Parent is using public assistance		*No*	*Yes*	*Chi Square*
	No	91.8%	8.2%	
	Yes	88.7%	11.3%	12.535***

Model Two	Have you ever run away from home?			
Parent birthplace		*No*	*Yes*	*Chi Square*
	No	90.7%	9.3%	
	Yes	91.7%	8.3%	1.966

Model Three	Have you ever run away from home?			
		No	*Yes*	*Chi Square*
	Less than high school	89.6%	10.4%	34.226***
	Business or trade school instead of high school	92.2%	7.8%	
Parent education level	High school graduate or GED	90.8%	9.2%	
	Some college	90.0%	10.0%	
	College degree	92.6%	7.4%	
	Professional training beyond college	94.0%	6.0%	

Model Four	Have you ever run away from home?			
		No	*Yes*	*Chi Square*
How often in the last month have you had five or more drinks in one setting?	*Never*	92.1%	7.9%	36.423***
	1-2 times	88.7%	11.3%	
	3 or more times	85.6%	14.4%	

Only one of the family level variables tested in the chi square models above was not significantly related to runaway rates -- parent birthplace. Therefore this variable has been removed from the regression analysis. The regression analysis combines all of the family level characteristics in one model and adds control variables at the child level.

A number of variables that were significant in the chi square models are no longer significantly related to runaway rates with all the other controlling variables included. For family stability measures we find that parental marital status is no longer significant. However, if the parent has lived apart from the child for six or more months and foster care history, are both connected with runaway status. Foster care status has a very large impact, as children who have been in foster care are 2.6 times more likely to run away than those who have not, even with all the other controls in the model. A parent absence of six or more months led to a 1.5 fold increase in likelihood of runaway behavior.

All three family abuse measures are significant at p<.10 although the significance of sexual abuse is much lower at .066 than the significance of verbal and physical abuse at .000 each. Only two of the measures of quality of parent-child relationship remain significant, parent and child get along (.059) and does the parent trust the child (.000). Parents who report that they get along well with their children and those that report high levels of trust in their kids have children with lower runaway rates.

The only parent-specific characteristic that remains significant in this model is parent binge drinking. Parent education level and parent public assistance usage are not significant predictors of runaway behavior. Children of parents with high levels of binge drinking report running away 1.11 times more frequently than children whose parents do not exhibit high levels of binge drinking.

Table 5 – Multiple Logistic Regression Model of the Correlation between Family Characteristics and Lifetime Runaway Behavior

Category	Measure	B	S.E.	Sig	Exp(B)
Family stability measures	Parent married	-.051	.038	.176	.950
	Parent away 6 months+	.457	.105	.000	1.579
	Foster care	.968	.166	.000	2.634
Family abuse measures	Verbal abuse	.311	.087	.000	1.365
	Physical abuse	.842	.089	.000	1.365
	Sexual abuse	.252	.137	.066	1.287
Quality of family relationships	Parent and child get along	-.114	.060	.059	.893

measures	Parent and child make decisions together about child's life	-.045	.045	.310	.956
	Parent does not understand child	.051	.040	.206	1.053
	Parent trusts child	-.460	.044	.000	.631
	Child interferes with parent's activities	.004	.042	.920	1.004
Parent characteristics	Parent on public assistance	.051	.133	.698	1.053
	Parent education level	-.015	.017	.386	.985
	Parent binge drinking frequency	.109	.041	.009	1.115
Control variables – child demographics	Child gender (female)	.357	.079	.000	1.429
	Child bisexual	.774	.201	.000	1.429
	Child homosexual	.263	.281	.349	1.301
	Child Hispanic	.330	.104	.002	1.391
	Child African American	-.271	.101	.007	.763
	Child Asian	.364	.150	.015	1.438
	Child Native American	.151	.178	.396	1.163
	Constant	-.680	.367	.064	.507

DISCUSSION

This analysis provides strong support for the conclusion that family characteristics are important predictors of adolescent runaway behavior. All four types of family measures included variables that were significant in one-on-one tests with runaway behavior in chi square tests and together in a multiple logistic regression model. In the multiple regression model we found that family stability is closely related to runaway behavior with parental absence of six months or more and a stay in foster care both related to higher runaway rates. All three types of abuse; verbal, physical, and sexual, by a parent or guardian were tied to higher runaway rates by children. These findings are in line with previous research indicating that abuse and family instability lead to higher runaway rates.

While variables such as public assistance usage, birthplace of parent, and parent education level all had significant correlations with runaway rates in one on one chi square Analyses, these effects dropped out when control variables were included in the regression model. However, parental binge drinking rates were still significantly correlated with runaway rates. Very few studies have found a relationship between alcohol abuse at home and runaway rates.

This connection found using a nationally representative sample is indicative of an area that should be explored further.

Even more interesting, is the relationship between runaway rates and self-reported quality of relationship between parents and children, as that has not been previously studied. The parent-child relationship indicators of trust and how well the parent and child get along are both statistically significantly connected to runaway rates.

This research offers evidence to policymakers that family level variables are important factors in the mix of variables that determine runaway behaviors. Further research on family variables and their relationship to runaway behaviors is certainly warranted.

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