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# Human trafficking victimization among youth who run away from foster care



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#### ABSTRACT

Domestic minor human trafficking (HT) is a growing social justice concern, particularly among youth in the child welfare system. This paper uses administrative data to describe the characteristics and experiences of a population of youth in the child welfare system considered to be at particularly high risk of victimization: youth who have run away from foster care. Analyses are based on nearly 37,000 youth with at least one foster care placement in Florida at age 10 or older between 2011 and 2017. We examine the characteristics of youth with and without at least one foster care runaway episode, and the characteristics and experiences of youth with and without one or more HT allegations while on runaway status. Of the youth with at least one foster placement at age 10 or older, approximately 19% (n = 7039) had at least one foster care runaway episode, and of these youth, 7% (n = 542) had an HT allegation while on runaway status. Youth with HT allegations (compared to those without) during a foster care runaway episode were more likely to: be female, experience prior physical, psychological and sexual abuse, run from care at a younger age, experience more foster care placements since entry into the child welfare system, and experience more foster care runaway episodes. For most (70%) youth with a HT allegation during runaway status, the first identified trafficking allegation occurred during a foster care runaway episode. Most (67%) youth did not have another HT allegation up to a year later. Implications for research and child welfare policy and programs are discussed.

#### 1. Introduction

Human trafficking (HT) of youth is a growing public health and social justice concern (Chisolm-Straker & Stoklosa, 2017). Defined as the exploitation of minors for forced labor or commercial sex, HT has been linked to a wide range of negative physical and psychological health consequences, such as sexually transmitted infections, post-traumatic stress, and depression (e.g., Goldberg, Moore, Houck, Kaplan, & Barron, 2017; Hickle & Roe-Sepowitz, 2018; Oram, Khondoker, Abas, Broadbent, & Howard, 2015; Varma, Gillespie, McCracken, & Greenbaum, 2015). Although HT crosses cultural and economic boundaries, the last decade has seen calls for more focused efforts to understand victimization experiences among the most vulnerable youth

populations, including those in child welfare supervision (Child Welfare Information Gateway, 2017; Choi, 2015; Gibbs, Henninger, Tueller, & Kluckman, 2018; Hannan, Martin, Caceres, & Aledort, 2017).

In line with this focus, the purpose of this paper is to better understand the characteristics and experiences of a population of children and youth <sup>1</sup> in the child welfare system theorized to at particularly high risk of HT victimization: youth who have run away from foster care. <sup>2</sup> In fact, recognizing the vulnerability of this population, the 2014 Preventing Sex Trafficking and Strengthening Families Act (PSTSFA; Public Law 113–183) requires that child welfare systems (1) develop and implement protocols for locating youth missing from foster care, (2) determine factors that lead to youth being absent from care, and (3) assess whether youth experienced sex trafficking victimization while

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 $<sup>^{\</sup>rm 1}$  Hereafter "youth" is used to refer to children and youth aged 10 to 17 years.

<sup>&</sup>lt;sup>2</sup> Sometimes referred to as *out-of-home care*, we predominately use the term *foster care* to describe "24-h substitute care for children outside their own homes" (Code of Federal Regulations; CFR). This definition is consistent with that used by federal systems such as the Adoption and Foster Care Reporting System (AFCARS) and refers to both family- and non-family-based (e.g., residential) placements.

missing. Better understanding of the intersection between runaway episodes and HT victimization can directly inform child welfare policy and practice. In this paper, we focus on HT broadly (including sex and labor trafficking). However, the literature we reviewed focuses predominately on sex trafficking as it has received far more attention in the literature than has labor trafficking (Walts, 2017).

#### 1.1. Foster care and runaway episodes

Approximately half a million youth in the United States experience foster care placements each year, primarily in family foster care settings (e.g., non-relative foster care, relative foster care, or pre-adoptive homes), in addition to congregate care (group homes and institutions), or other placements such as visitation or a short-term hospital stay (Child Welfare Information Gateway, 2017). When youth are placed in foster care, the state assumes responsibility for provision of a safe and stable temporary setting. However, foster care systems have long struggled to provide stable placements; this can be due to placement mismatch (i.e., youth's needs exceeded the caregivers' abilities or tolerance), substandard care (i.e., violations of standards of care), and/or youth-initiated disruptions (i.e., youth ran away or refused to stay) (Sattler, Font, & Gershoff, 2018).

Youth-initiated disruptions, or runaway episodes, are a growing concern among policymakers and practitioners (Institute of Medicine [IOM] & National Research Council [NRC], 2014a; U.S. Department of Health and Human Services, 2014). Obtaining precise estimates of the number of youth who run away from foster care is difficult for several conceptual and methodological reasons, including variations in sample populations (e.g., youth drawn from child welfare or homeless/runaway shelters), methods employed (e.g., youth self-report, child welfare administrative data), and wide-ranging definitions of "running" from foster care. For example, some child welfare agencies report any youth who leaves a placement without consent as a runaway, whereas others report youth as having run away only after they are absent from care without consent for a minimum period of time, such as 24 h (Crosland & Dunlap, 2015).

Nonetheless, both administrative and self-report data indicate that a substantial portion of youth run away during their stay in foster care. Data from the Adoption and Foster Care Analysis and Reporting System (AFCARS) indicate that approximately 1% of foster care youth (4460 youth) were reported as being on runaway status at the end of 2016 (The Annie E. Casey Foundation Kids Count Data Center, 2018). These figures likely underestimate the extent to which youth run from foster care, because they reflect only those youth who were on runaway status at the end of the report period, but not youth who ran away at some other point during the year. In fact, youth self-report data drawn from regional and county-level studies suggests that approximately 15 to 46% of youth in foster care report running away at least once, and many youths run away multiple times (Biehal & Wade, 2000; Courtney & Barth, 1996; Courtney, Terao, & Bost, 2004; Nesmith, 2006; Pergamit & Johnson, 2009). Furthermore, available evidence suggests that youth involved in the child welfare system involved youth represent 13% to 18% of the entire runaway youth population (Crosland & Dunlap, 2015).

Both quantitative and qualitative research have identified factors associated with youth running away from foster care. At the individual level, runaway behavior tends to be more common among lesbian, gay and bisexual youth (compared to heterosexual youth) (Taylor, 2013). Furthermore, multiple studies of foster care youth have found that the likelihood of running away increases with every year in age (e.g., Connell, Katz, Saunders, & Tebes, 2006; Courtney & Zinn, 2009; Crosland & Dunlap, 2015; Kim, Chenot, & Lee, 2015; Lin, 2012; Sarri, Stoffregen, & Ryan, 2016). However, some findings indicate that the risk of running may peak in the around 14 to 16 years of age (Biehal & Wade, 2000; Fasulo, Cross, Mosley, & Leavey, 2002; Sunseri, 2003). The relationship between gender and running away is mixed; although

the majority of research has found that females run away at a higher frequency than males (e.g., English & English, 1999; Fasulo et al., 2002), other work has failed to find a difference by gender (e.g., Biehal & Wade, 2000; Courtney et al., 2005a), particularly when the cumulative impact of other risk factors is examined (Nesmith, 2006). The relationship between race/ethnicity and risk of running from foster care is also somewhat complex, with some studies finding an increased risk of running among nonwhite youth (Connell et al., 2006; Courtney et al., 2005b; Lin, 2012), although other research has documented no differences by race or ethnicity (Biehal & Wade, 2000; Courtney & Barth, 1996).

Child welfare experiences associated with running from foster care include a history of multiple foster care placements, including both repeated removals from home and repeated placements within removal episodes (e.g., Bowden & Lambie, 2015; Connell et al., 2006; Courtney, Skyles, et al., 2005b; Crosland & Dunlap, 2015; Kim et al., 2015; Lin, 2012; Skyles & Smithgall, 2007). Other factors associated with increased risk of running from foster include: prior runaway history (Courtney & Zinn, 2009; Nesmith, 2006; Taylor, 2013), placement in group and residential care facilities rather than in family or nonfamily foster care placements (Courtney & Zinn, 2009), and placements that separate sibling groups (Courtney, Skyles, et al., 2005b). Qualitative work indicates the reasons for running away from foster care may be classified as either "push" or "pull" factors (Biehal & Wade, 2000), such as escaping from unsafe, overcrowded, and highly restrictive placements (e.g., prohibitions on peer sleepovers) (Cavazos, 2016; Dank et al., 2015) and gaining access to family, friends and romantic partners (Courtney, Dworsky, et al., 2005a; Crosland, Joseph, Slattery, Hodges, & Dunlap, 2018; Karam & Robert, 2013).

#### 1.2. Victimization experiences of runaway youth

Compared to their peers, youth who have run from foster care have a greater likelihood of experiencing numerous adverse outcomes, including HIV infection (Booth, Zhang, & Kwiatkowski, 1999), substance use (Biehal & Wade, 1999), academic underperformance (Biehal & Wade, 1999; Skyles & Smithgall, 2007), and subsequent juvenile justice system involvement (Biehal & Wade, 1999; Sarri et al., 2016). However, relatively less is known about the victimization experiences amongyouth who have run from foster care.

The majority of research examining victimization outcomes, including HT, has focused on running away from home, rather than running away from foster care (e.g., Cole, Sprang, Lee, & Cohen, 2016; Edwards, Iritani, & Hallfors, 2006; Fedina, Williamson, & Perdue, 2016; Greene, Ennett, & Ringwalt, 1999; Hammer, Finkelhor, & Sedlack, 2002; IOM & NRC, 2014a; O'Brien, White, & Rizo, 2017; Reid, 2011; Ulloa, Salazar, & Monjaras, 2016). For example, using data from the National Study of Adolescent to Adult Health, Ulloa et al. (2016) found that youth with a history of running away were 2.58 times more likely to report exchanging sex3 (for drugs, money, food, shelter, or other favors) than youth without a history of running away. Similarly, in a study focused on individuals arrested for sex trafficking of a minor, Roe-Sepowitz et al. (2017) found that in more than two-thirds of cases, traffickers' victims were runaways, and in more than 6% of cases, the victim was currently in foster care. Unfortunately, the authors did not report the overlap between these groups; that is, the number of youths victimized during a foster care runaway episode. Finally, some prelimary work indicates that running away from home may confer unique risk for sex trafficking versus other forms of sexual victimization (non-HT sexual abuse; Varma et al., 2015).

As noted, there is a dearth of research examining the relationship

<sup>&</sup>lt;sup>3</sup> Survival sex, or the exchange of sexual acts to meet basic needs, falls under the legal definition of sex trafficking when involving a minor (IOM & NRC, 2014a).

between running away from foster care specifically and HT victimization. Many researchers have theorized that youth absent from foster care are more vulnerable than other runaways, because they may not only lack resources for basic needs (e.g., food, housing), but may also have fewer social resources or family relationships to which they can turn (Cavazos, 2016; Dank et al., 2015). However, to our knowledge, only a few quantitative studies have focused on this topic, and most have been descriptive. For example, in an examination of Florida child welfare records, Gibbs et al. (2018) found that youth with HT allegations were more likely than others to have been reported missing from foster care: although this analysis did not examine the timing of the HT allegation in relation to missing episodes. In another review of case records of sex trafficked youth in Florida, Reid (2015) found that 41 female foster youth (44% of the total sample) self-reported exploitation while on the run from foster care. Running away from foster care represented the most commonly reported "path of endangerment" into trafficking (other reported paths into trafficking include recruitment by another youth in foster care or by a noncustodial parent). Similarly, Texas' annual Foster Youth Runaway Report indicates that over the course of a single year, 62 youth (7.9% of those on runaway status) reported being victimized (e.g., HT, sexual abuse, physical abuse) while on the run from foster care, with most youth reporting experiencing multiple types of victimization (Texas Department of Family and Protective Services, 2018). Finally, Havlicek, Huston, Boughton, and Zhang (2016) found that, in Illinois, of the 54 youth with an investigated HT allegation while in foster care, nine (17%) were on runaway status at the time of the recorded allegation.

Although these studies provide valuable information with regard to the potential risk associated with running from foster care, no studies to date have examined the characteristics of youth with HT allegations while on runaway status vis-à-vis youth without HT allegations while on runaway status. Thus, it is not yet known the extent to which youth who are victimized during a runaway episode are similar to or different from youth who are not victimized during a runaway episode.

### 1.3. Current study

The overarching goal of the present study is to explore the intersection between runaway episodes and HT victimization in a sample of youth aged 10 and older drawn from Florida's statewide child welfare system. We have four main aims. First, we aim to replicate and extend prior work by examining the characteristics of youth in foster care with and without runaway episodes. Consistent with previous research, we expect youth with runaway episodes will be more likely to be older,

female, and have a history of more foster care placements compared to youth without runaway episodes. Due to the mixed literature, we do not have any hypotheses with regard to race and ethnicity.

Building on the larger empirical research on the risk of HT associated with running away from home, we also aim to examine: the characteristics of runaway episodes with and without HT allegations; the characteristics of youth with and without HT allegations while on runaway status; and the experiences of youth with one or more HT allegations while on runaway status. Due to a paucity of theoretical assertions and empirical research, these three aims are exploratory in nature, focused on describing the characteristics of episodes and experiences of victimized youth. In addition to guiding future empirical efforts, such analyses have substantial practice relevance: understanding youth most at risk for HT allegations while on runaway status is critical for identifying types of youth in child welfare custody who may benefit from different kinds of help and intervention and for developing problem-specific prevention programs (IOM & NRC, 2013, 2014b).

#### 2. Method

### 2.1. Study population

The data used for this study are from the Florida Safe Families Network, the child welfare information system of the Department of Children and Families' (DCF). Florida's response to HT predates the PSTSFA. Beginning in 2009, DCF defined procedures for recording of HT made to the statewide abuse hotline, sharing reports with law enforcement, and investigating allegations of HT.

Specifically, our analysis focuses on the 36,997 youth who (1) were subjects of one or more investigations for maltreatment allegations received by DCF between January 1, 2011, and December 31, 2017; and (2) experienced at least one foster care placement at age 10 years or older. For these youth, data include all child welfare events, such as maltreatment allegations, foster care placements, and runaway episodes, between birth and age 18 (or December 31, 2017, the last date in the analytic file). A large percentage (approximately 93%) of our sample first entered foster care more than year before the close of the observation window. See Fig. 1 for a flow diagram depicting the study population.

As noted earlier, we focus on youth with a stay in foster care while age 10 and older. In our sample, only 0.8% of all youth with episodes of being missing from foster care had a missing episode only prior to age 10. Therefore, by limiting our sample to those age 10 and older we are

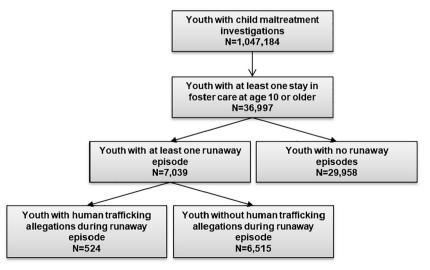


Fig. 1. Study sample flow diagram, youth drawn from the Florida Safe Families Network 2011-2017.

excluding a very small portion of the population and one that is likely different from older youth. Event-level data were linked by a unique system ID, prepared by DCF and not connectable to identifying data by the research team. All study procedures were reviewed and approved by Institutional Review Boards at DCF and at 'RTI International.

#### 2.2. Key variables

The analytic file includes all data available from the Florida Safe Families Network that relate to child characteristics (date of birth, gender, race, Hispanic ethnicity), allegations, placements, and runaway episodes. Allegations, placements and runaway episodes are discussed briefly below. Additional details about the analytic file can be found in Gibbs and colleagues (2018).<sup>4</sup>

#### 2.3. Child maltreatment allegations

Allegations were coded by the study team into maltreatment categories of physical abuse, sexual abuse, neglect, or psychological/emotional abuse following data mapping protocols used by DCF for reporting allegations to the National Child Abuse and Neglect Data System. However, a separate maltreatment category was created for HT allegations rather than using the DCF protocol, which classifies these forms of maltreatment as sexual abuse or neglect. This single HT category includes sex trafficking, labor trafficking, and HT of undifferentiated type. We did not separate trafficking types due to changes in DCF's allegation categories over time. Before 2013, DCF used a single allegation to record both sex and labor trafficking, whereas separate allegations for sex trafficking and for labor trafficking were implemented in 2013.

Despite the possibility of false-positive cases (or, counting a youth as having experienced victimization when he or she never experienced HT), there is strong evidence that many unsubstantiated allegations do involve child maltreatment (Drake, 1996), and there are few behavioral and developmental differences between children with unsubstantiated and substantiated or verified allegations (Drake, 1996; Hussey et al., 2005). In trafficking cases, which overwhelmingly involve a non-caregiver perpetrator (Roe-Sepowitz et al., 2017) and youth reluctant to assist with the investigation (Reid, 2013), gathering enough evidence for substantiation may be even more difficult than it is with other types of maltreatment (Reid, Baglivio, Piquero, Greenwald, & Epps, 2017).

#### 2.4. Foster care placements

Start and end dates were recorded for every type of placement. Foster care placements include: family care (e.g., relative foster home, non-relative foster home, or pre-adoption placement), congregate care (e.g., group home, residential treatment center, or correctional placement), and other, such as a short-term hospital stay or visitation.

## 2.5. Foster care runaway episodes

Foster care runaway episodes were defined using dates from "missing child reports" – which, in Florida, are to be completed and reported to law enforcement no later than 4 h after it is learned that a child is missing – and the type of placement from which a child was missing. Missing child reports capture three reasons why a child may be missing: runaway (i.e., child has a child welfare or in-home placement without permission of the caregiver and who is determined to be missing), absconded (i.e., an individual who has care and custody of a child under the jurisdiction of a dependency court has taken the child and left the jurisdiction of the court), and abducted (i.e., an individual

who does not have care and custody of a child under the jurisdiction of a dependency court has taken the child and left the jurisdiction of the court) (Florida Department of Children and Families, Community Based Care Providers, & Florida Department of Law Enforcement/Missing Endangered Persons Information Clearinghouse, 2008). Florida DCF notes that more than 95% of missing episodes, regardless of age, are due to a youth running away. Among youth age 10 and older, an even higher percentage of missing child reports are due to youth running from foster care rather than absconding or abductions. Thus, missing child reports in our sample are nearly all, if not all, due to runaway episodes.

In fewer than 2% of cases, following a removal from the home, the first placement type was recorded as a runaway episode (i.e., the child ran away before a planned placement). In these cases, the episode was categorized as running away from the subsequent placement type. We reconciled discrepant placement and runaway dates based on the best available information, and the advice of DCF staff.

Youth were classified has having an HT allegation while on runaway status if the allegation was recorded during the time they were absent from foster care up to within three days of recovery. According to DCF, the allegation received date could be several days after recovery for several reasons. These include hotline reports that lack sufficient information for an investigator to locate the youth, youth recovered in a different county who need to be brought back to the originating county for assessment, and delays in entering reports into the Florida Safe Families Network. DCF notes that it is possible that for these same reasons, reports may be filed even later than 3 days after recovery. Therefore, our decision to limit allegation received dates to up to 3 days after recovery should provide a conservative estimate of the relationship between foster care runaway episodes and HT victimization.

#### 3. Analysis

To examine our first aim, we calculated descriptive statistics for child, maltreatment, and placement characteristics, stratified by youth in foster care with and without runaway episodes. To compare the characteristics of runaway and non-runaway youth, we used a logistic regression model that controlled for age at the time of the most recent placement end, or the date of the data pull (December 31, 2017) if still in placement. Adjusted odds ratios (AORs) in these analyses compare the relative likelihood of a characteristic, such as history of child physical abuse, across these two populations. Age was used as a control due to research indicating that the likelihood of running away from foster care either peaks in the mid-teenage years (e.g., Biehal & Wade, 2000) or continues to increase into later adolescence (Sarri et al., 2016).

To examine our second aim, we calculated descriptive statistics stratified by foster care runaway episodes with an HT allegation and episodes without an HT allegation. Here we focused on variables in our analytic dataset that are tied to episodes (rather than youth), such as the number of days on runaway. To further explain: we could not assign individual youth a "number of days on runaway status" since youth may have had multiple runaway episodes of varying lengths. Thus, we examined days on runaway status for each *episode*. Here we also used AORs and 95% confidence intervals (CIs) to compare foster care runaway episodes with and without HT allegations. The logistic regression model controlled for age at the start of the runaway episode.

To examine our third aim, we calculated descriptive statistics for child, maltreatment, and placement characteristics, stratified by youth with and without HT allegations during a runaway episode. To compare the characteristics of youth who did and did not experience HT while on runaway status, we used a logistic regression model that controlled for age at the start of the youth's most recent foster care runaway episode. Here again age is an important control given research supporting a relationship between age and both the type of child welfare placement (Connell et al., 2006) and a higher number of overall placements

<sup>&</sup>lt;sup>4</sup> Our analysis includes 2 more years of data than that used by Gibbs et al. (2018) but uses the same conventions for coding.

#### (Wulczyn, Kogan, & Harden, 2003).

Finally, to examine our fourth aim we calculated descriptive statistics to examine the experiences (e.g., placements, subsequent HT allegations) of youth with one or more HT allegations during a foster care runaway episode.

It is critical to note that our investigation is focused on youth with HT allegations during foster care runaway episodes compared to youth without HT allegations during foster care runaway episodes. Thus, it is possible that youth in the comparison group may have experienced HT at another point, such as while in foster care or living at home. This group construction was intentional, to provide a focused "first look" at the characteristics of youth who experience HT during a foster care runaway episode vis-à-vis other youth with foster care runaway episodes, or those who may have comparable risks for victimization. To the extent to which this comparison group might introduce cases where HT occurred while not in placement or not on runaway status, this group construction should provide a conservative estimate of the influence of child, maltreatment and placement characteristics on the association between foster care runaway episodes and HT. 5

All analyses were run in SAS Version 9.4.

#### 4. Results

# 4.1. Characteristics of youth in foster care with and without runaway episodes

The first set of analyses were conducted to evaluate our first aim, the characteristics of youth in foster care with and without runaway episodes. Of the 36,997 youth with a foster care placement at age 10 or older, 19.0% (n=7039) had at least 1 episode of running from foster care. Of these youth, the majority (87.9%, n=6179) were age 13 or older at the time of their first run, with the largest proportion of youth (41.3%, n=2904) age 15 to 16 when they first ran from care. Approximately 29% (n=2203) of the runaway sample had 1 episode of running from foster care, with the majority of youth running from care 2 times (13.5%, n=952), 3 to 10 times (35.6%, n=2506), or more than 11 times (22.2%, n=1558).

Controlling for age at the time of last placement, youth with runaway episodes were equally likely to be female, more likely to be nonwhite, and less likely to be Hispanic compared to those with no runaway episodes. With regard to maltreatment history, youth with runaway episodes were more likely to have experienced all forms of maltreatment compared to those with no runaway episodes. Finally, youth with one or more runaway episodes tended to be older at the time of first foster care placement and experience more foster care placements than their counterparts. In fact, youth with runaway episodes had median of 10 prior placements, compared to 2 placements for those with no history of running from foster care (see Table 1).

# 4.2. Characteristics of foster care runaway episodes with and without human trafficking allegations

The second set of analyses were conducted to evaluate our second aim, the characteristics of foster care runaway episodes with and without HT allegations. Among 57,323 foster care runaway episodes in the study population, 742 (1.3%) included an HT allegation. As shown in Table 2, runaway episodes that include HT allegations are more likely to be initiated from family-based foster care and other placements (visitation or a short-term hospital stay) compared to

episodes that do not include HT allegations. Runaway episodes with HT allegations also tended to be longer in duration when compared to runaway episodes without HT allegations. Compared to no time on the run, the odds of a runaway episode involving HT were 1.07 and 1.35 times greater for episodes lasting one week and one month in duration, respectively.

# 4.3. Characteristics of youth with and without human trafficking allegations while on runaway status

Characteristics of youth with and without HT allegations while on runaway status are presented in Table 3. As shown, among youth with at least one foster care runaway episode, 7.4% (n = 524) had an allegation of HT while on runaway status. Youth who experience HT allegations while on runway status were more likely to be female compared to youth with no HT allegations during a runaway episode. We found no significant differences with regard to race or ethnicity. With regard to maltreatment, youth with HT allegations during foster care runaway episodes were more likely than those without HT allegations while on runaway status to have prior (to first run from from foster care) and subsequent (to first run from foster care) reports of sexual abuse, physical abuse, and psychological abuse (but not neglect for prior reports). With regard to placement factors, youth with HT allegations during foster care runaway episodes versus those without tended to be younger when they first ran from foster care, have had more runaway episodes since age 10, and have experienced more foster care placements. The odds of HT during a runaway episode were 118% greater among youth with the median number of 16 runaway episodes than among youth with one runaway episode. Further, the odds of HT during a runaway episode were 70% greater among youth with the median number of 18 placements versus 1 placement.

# 4.4. Experiences of youth with human trafficking allegations while on runaway status

Finally, we examined the experiences of youth with one or more HT allegations while on runaway status. Descriptive statistics are provided in Table 4. The mean age for the first HT allegation while on runaway status was 16 years. Although approximately 15% of youth with HT allegations while on runaway status experienced HT the first time they ran from foster care, most youth had prior runaway episodes (with more than a third having run from foster care more than 10 times). For most youth (70%) with an HT allegation during a runaway episode, the first identified experience of HT victimization occurred while the youth was on runaway status. Among the 30% of youth with prior HT allegations, most allegations (53%) were recorded while the youth was living outside of a child welfare placement (e.g., at home), with others recorded while the youth was in a foster care placement (39%) or both in and outside of a foster care placement (8%). Approximately 67% of youth with HT allegations during runaway episodes did not have any subsequent HT allegations - recorded while in any type of placement (e.g., in foster care - including during runaway status, at home) - up to a year later.

#### 5. Discussion

The current investigation is the largest to date to examine the intersection between foster care runaway episodes and trafficking victimization. This study adds to both the broader literature on youth who run away from child welfare supervision as well as the more specific literature on youth victimization experiences while absent from foster care. In fact, it is the first study to date to examine the individual, maltreatment, and child welfare placement characteristics among youth who experience HT victimization while on runaway status relative to youth who do not experience reported HT while on runaway status. The results are an essential first step toward the goal of advancing the child

 $<sup>^5</sup>$  Indeed, post-hoc analyses indicate that 550 youth (1.8% of the 29,958 youth with zero episodes of foster care runaway episodes) experienced HT either while at home or in a foster are placement (but not while on runaway status). Information on HT experienced by the entire foster care sample can be found in Gibbs et al. (2018).

Table 1
Characteristics of youth in foster care with and without runaway episodes, Florida Safe Families Network 2011–2017.

	All youth in foster care <sup>1</sup> N = 36,997  n (%)	Sub-population A: Youth with at least one runaway episode <sup>1</sup> $N = 7039$ $n$ (%)	Sub-population B: Youth with no runaway episodes <sup>1</sup> $N = 29,958$ $n$ (%)	Sub-population A relative to sub- population B  Adjusted odds ratio (95% CI) <sup>2</sup>
Gender <sup>3</sup>				
Male (ref.)	17,612 (47.6)	3186 (45.3)	14,426 (48.2)	
Female	19,375 (52.4)	3853 (54.7)	15,522 (51.8)	1.00
Race				(0.94–1.06)
White (ref.)	21,050 (56.9)	3550 (50.4)	17,500 (58.4)	
Black and/or other	15,947 (43.1)	3489 (49.6)	12,458 (41.6)	1.32
Diack and, or other	10,5 17 (1011)	0.05 (15.0)	12, 100 (11.0)	(1.24–1.40)
Hispanic ethnicity				
Non-Hispanic (ref.)	31,059 (84.0)	5967 (84.8)	25,092 (83.8)	
Hispanic	5938 (16.0)	1072 (15.2)	4866 (16.2)	0.88
				(0.81-0.95)
Child maltreatment history <sup>4</sup>				
Any physical abuse	22,329 (60.4)	5197 (73.8)	17,132 (57.2)	2.09
				(1.95–2.23)
Any psychological abuse	10,146 (27.4)	2509 (35.6)	7637 (25.5)	1.44
				(1.35–1.54)
Any neglect	34,939 (94.4)	6737 (95.7)	28,202 (94.1)	1.91
				(1.67–2.20)
Any sexual abuse	9686 (26.2)	2508 (35.6)	7178 (24.0)	1.51
				(1.41–1.61)
	Mean (SD), Median	Mean (SD), Median	Mean (SD), Median	
Age at first foster care placement	10.56 years (4.52),	11.44 years (5.01), 13.22	10.35 years (4.37), 10.76	0.94
	11.02			(0.93-0.94)
	Mean (SD)	Mean (SD)	Mean (SD)	
	25th, 50th, 75th percentile	25th, 50th, 75th percentile	25th, 50th, 75th percentile	
Total number of foster care	6.10 placements (9.19)	14.68 placements (15.22)	4.08 placements (5.34)	1.13
placements <sup>5</sup>	1 placement (25th)	5 placements (25th)	1 placement (25th)	(1.12-1.13)
-	3 placements (50th)	10 placements (50th)	2 placements (50th)	
	7 placements (75th)	19 placements (75th)	5 placements (75th)	

Note. ref. = reference group.

**Boldface** indicates Wald Chi-square p-value < .01.

welfare response to HT victimization and youth who run away from foster care.

### 5.1. Foster care and runaway episodes

First, we sought to replicate and extend prior work by examining the characteristics of youth in foster care with and without runaway episodes. Of the nearly 40,000 youth with at least 1 foster care placement at age 10 or older, approximately 19% ran from care at least once. As expected, this percentage is higher than point-in-time estimates derived from AFCARS (The Annie E. Casey Foundation Kids Count Data Center, 2018), and lower than estimates obtained from youth self-report (Courtney et al., 2004; Pergamit & Johnson, 2009), which likely capture episodes that may not meet the agency's runaway criteria (e.g., the episode is too short).

Compared to youth without runaway episodes, we found that youth with runaway episodes were more likely to be nonwhite, less likely to be Hispanic, and more likely to have experienced all forms of child maltreatment. Although females represented a slightly larger portion of the foster care population age 10 and older (52%), we found that

females were equally as likely as males to run away. Although prior research on gender is mixed, most work has found that females have an increased risk of running away from foster care (Lin, 2012). It is possible that other factors typically more prevalent among females in care—such as depression, suicidality and posttraumatic stress (e.g., Courtney & Charles, 2015; Heneghan et al., 2013)—were overrepresented among the males in the sample, thus potentially weakening the expected association between gender and foster care runaway episodes. In-depth analysis of child welfare case management notes (i.e., information that may not be captured by the administrative dataset analyzed in the present study) may help elucidate these findings. Future researchers may also want to examine, in other states or at the county or court jurisdiction level, the relationship between Hispanic ethnicity and running from care. Although Hispanic and Latino youth tend to be underrepresented in the child welfare system (including in Florida), they are overrepresented in a few states, such as Massachusetts, New Hampshire, and Maine (Summers, 2015).

With regard to placement history, youth in foster care with runaway episodes were older at the time of first placement than those without runaway episodes (median age of 13 vs. 11 years). The majority of

 $<sup>^{1}</sup>$  Limited to youth with at least one foster care placement at age 10 or older.

<sup>&</sup>lt;sup>2</sup> Generated from logistic model, which controlled for age at end of last placement (or age on 12/31/2017 if still in a placement on this date). Youth with one or more foster care runaway episodes had a mean age of 16.8 years (SD 1.55), whereas youth with zero foster care runaway episodes had a mean age of 13.6 years (SD 2.47).

There are 10 youth of unknown gender with zero foster care runaway episodes while age 10 or older.

<sup>&</sup>lt;sup>4</sup> Reference category for each analysis is the absence of a report of that specific type of maltreatment; e.g., zero physical abuse reports for "any physical abuse."

<sup>&</sup>lt;sup>5</sup> To assist with interpretation, readers can use the exponent of an exponent rule, or  $\exp(\beta * 2) = \exp(\beta)^2$ . Compared to youth with one placement, youth with the median number of 10 placements are at OR = 3.39 (3.11–3.39) times the risk, and youth with 19 placements (75th percentile) are at OR = 10.20 (8.61–10.20) times the risk of a foster care runaway episode.

Table 2
Characteristics of foster care runaway episodes with and without human trafficking (HT) allegations, Florida Safe Families Network 2011–2017.

	All foster care runaway episodes¹ N = 57,323 n (%)	Sub-population A: Runaway episodes with HT allegations $N = 742$	Sub-population B: Runaway episodes without HT allegations <sup>1</sup> N = 56,581 n (%)	Sub-population A relative to sub-population B  Adjusted odds ratio (95% CI) <sup>2</sup>
Placement from which run initiated				
Congregate care (ref.)	45,405 (79.2)	526 (70.9)	44,879 (79.3)	
Family-based foster care	10,592 (18.5)	178 (24.0)	10,414 (18.4)	1.48 (1.25–1.76)
Other <sup>3</sup>	1326 (2.3)	38 (5.1)	1288 (2.3)	2.51 (1.80–3.51)
Trafficking allegation type (s) <sup>4</sup>				, ,
Unspecified		77 (12.1)		
Sex		551 (86.8)		
Labor		11 (1.7)		
	Mean (SD)	Mean (SD)	Mean (SD)	
	25th, 50th, 75th percentile	25th, 50th, 75th percentile	25th, 50th, 75th percentile	
Length of runaway episode <sup>5</sup>	8.84 days (29.78)	32.34 days (60.04)	8.53 days (29.05)	1.01
	2 days (25th)	3 days (25th)	2 days (25th)	(1.01–1.01)
	2 days (50th)	9 days (50th)	2 days (50th)	
	5 days (75th)	35 days (75th)	5 days (75th)	

*Note.* **Boldface** indicates Wald Chi-square p-value < .01.

youth (approximately 88%) were age 13 or older at the time of their first runaway episode, with the largest proportion of youth being 15 to 16 years old. Consistent with the larger literature, placement instability, or "drift," was common for the entire sample of foster youth (e.g., Connell et al., 2006; Koh, Rolock, Cross, & Eblen-Manning, 2014; Rubin, O'Reilly, Luan, & Localio, 2007); however, in our sample, every additional placement put youth at increased risk for a runaway episode.

In general, results from these analyses suggest important avenues for future longitudinal work to explore. Adolescence is a particularly vulnerable period for youth to enter foster care (Oosterman, Schuengel, Slot, Bullens, & Doreleijers, 2007; Sattler et al., 2018). Removal during this period entails not only separation from their parent(s), but possible separation from peer and school networks, longer exposure to adversity and trauma (or, in our sample, exposure to more forms of maltreatment), and a developmentally expected increase in risk-taking behaviors, emotional reactivity, and desire for autonomy (Steinberg et al., 2018). Although not possible with the current data, developmentally-sensitive analyses examining the relative and interactive contribution of each of these factors will be important to inform runaway prevention programming. Such analyses should also consider youth motivation for running away, including both "push" and "pull" factors (Biehal & Wade, 2000).

#### 5.2. Human trafficking during foster care runaway episodes

Second, we conducted exploratory analyses to examine the characteristics of both runaway episodes with HT allegations and youth with HT allegations while on runaway status. We found that of all foster care runaway episodes, 1.3% (n=742) were associated with an HT allegation. Analysis of data from 2013 to 2017 (when separate labor and sex trafficking categories were implemented) indicate that the vast majority of allegations were for sex trafficking (allegations recorded as

undifferentiated from 2013 onward were in error and due to a delay in migrating to a new system for processing intake reports, although DCF estimates that at least 90% of undifferentiated allegations were sex trafficking). The most common placement type from which youth ran was congregate care (i.e., group and residential care facilities) from which 79% of foster care runaway episodes occurred. However, family-based foster care runaway episodes were 1.48 times more likely to be associated with HT, compared to congregate care runaway episodes. Anecdotal reports associating congregate care and trafficking victimization are common (see, e.g., Gibbs, Hardison Walters, Lutnick, Miller, & Kluckman, 2015), and may be related to frequent use of these placements for adolescents. More research is needed to examine this association, particularly multivariate analyses that consider the interactive relationships among race and ethnicity, age, and placement type on risk for HT.

Among youth with at least one runaway episode, 7.4% (n=524) had an HT allegation while on runaway status. Consistent with the larger literature on HT victimization (IOM & NRC, 2013), youth who experienced HT victimization while on runaway status were more likely to be female and slightly younger at the time of their first runaway episode compared to youth with no HT allegations while on runaway status. We found no significant differences with regard to race or ethnicity. Group-level comparisons with regard to maltreatment and placement characteristics paint a similar picture similar to the results described above – youth with HT allegations while on runaway status were more likely to have experienced other forms of abuse and a higher number of out-of-home placements. These findings are consistent with the larger literature highlighting the negative impact of placement instability on the well-being and development of youth who have experienced maltreatment (e.g., Koh et al., 2014; Wulczyn et al., 2003).

Interesting results emerged with regard to the experiences of the 524 youth with HT allegations while on runaway status. A minority of

<sup>&</sup>lt;sup>1</sup> Limited to episodes for youth with at least one foster care placement at age 10 or older.

<sup>&</sup>lt;sup>2</sup> Generated from logistic model, which controlled for age at the start of the foster care runaway episode.

<sup>&</sup>lt;sup>3</sup> Other includes visitation or short-term hospital stay.

<sup>&</sup>lt;sup>4</sup> Excludes 107 foster care runaway episodes before 1/1/2013 (when specific allegations for sex and labor trafficking were implemented). Percentages shown are out of 635 runaway episodes.

<sup>&</sup>lt;sup>5</sup> To assist with interpretation, readers can use the exponent of an exponent rule, or  $\exp(\beta * 2) = \exp(\beta)^2$ . Compared to no time on the run, runaway episodes lasting one week is OR = 1.07 (1.07-1.07), 1 month is OR = 1.35 (1.35-1.35), and 2 months is OR = 1.82 (1.82-1.82).

Table 3
Characteristics of youth with and without human trafficking (HT) allegations while on runaway status, Florida Safe Families Network 2011–2017.

	All youth with at least one foster care runaway episode $^{1}$ N = 7039	Sub-population A: Youth with one or more HT allegations during runaway episode $^1$ $N = 524$	Sub-population B: Youth with no HT allegations during runaway episode <sup>1</sup> $N = 6515$	Sub-population A relative to sub-population B
	n (%)	n (%)	n (%)	Adjusted odds ratio (95% CI) <sup>2</sup>
Gender				
Male (ref.) Female	3186 (45.3) 3853 (54.7)	38 (7.3) 486 (92.8)	3148 (48.3) 3367 (51.7)	11.90 (8.51–16.62)
Race				(0.31-10.02)
White (ref.) Black and/or other	3550 (50.4) 3489 (49.6)	262 (50.0) 262 (50.0)	3288 (50.5) 3227 (49.5)	1.00 (0.84–1.20)
Hispanic ethnicity				(0.04–1.20)
Non-Hispanic (ref.) Hispanic	5967 (84.8) 1072 (15.2)	443 (84.5) 81 (15.5)	5524 (84.8) 991 (15.2)	1.00 (0.78–1.28)
Child maltreatment reports (any time) <sup>3</sup>				<b>(</b> ,
Any physical abuse	5197 (73.8)	427 (81.5)	4770 (73.2)	1.69 (1.34–2.12)
Any psychological abuse	2509 (35.6)	231 (44.1)	2278 (35.0)	1.48 (1.24–1.77)
Any neglect	6737 (95.7)	497 (94.9)	6240 (95.8)	0.89 (0.59–1.34)
Any sexual abuse	2508 (35.6)	330 (63.0)	2178 (33.4)	3.47 (2.88–4.18)
Child maltreatment reports prior to first foster care run <sup>3</sup>				(2.00-4.10)
Any physical abuse	4770 (67.8)	382 (72.9)	4388 (67.4)	1.33 (1.09–1.63)
Any psychological abuse	2176 (30.9)	192 (36.6)	1984 (30.5)	1.30 (1.08–1.57)
Any neglect	6387 (90.7)	465 (88.7)	5922 (90.9)	0.83 (0.63–1.11)
Any sexual abuse	1928 (27.4)	242 (46.2)	1686 (25.9)	2.49
Child maltreatment reports after first foster care run <sup>3</sup>				(2.08–2.99)
Any physical abuse	1646 (23.4)	177 (33.8)	1469 (22.6)	1.97 (1.63–2.39)
Any psychological abuse	523 (7.4)	61 (11.6)	462 (7.1)	1.93 (1.45–2.57)
Any neglect	3056 (43.4)	293 (55.9)	2763 (42.4)	1.90 (1.58–2.28)
Any sexual abuse	907 (12.9)	151 (28.8)	756 (11.6)	3.24 (2.63–3.98)
	Mean (SD), Median	Mean (SD), Median	Mean (SD), Median	
Age at first foster care runaway episode	15.15 years (1.88), 15.39	14.80 years (1.59), 14.88	15.18 years (1.90), 15.45	0.74 (0.71–0.78)
Number foster care runaway	Mean (SD) 25th, 50th, 75th percentile 8.14 episodes (12.67)	Mean (SD) 25th, 50th, 75th percentile 22.07 episodes (21.99)	Mean (SD) 25th, 50th, 75th percentile 7.02 episodes (10.85)	1.05
episodes since age 10 <sup>4</sup>	1 episode (25th) 3 episodes (50th) 9 episodes (75th)	6.5 episodes (25th) 16 episodes (50th) 29.5 episodes (75th)	1 episode (25th) 3 episodes (50th) 8 episodes (75th)	(1.04–1.05)
Total number of foster care placements <sup>5</sup>	14.68 placements (15.22) 5 placements (25th) 10 placements (50th) 19 placements (75th)	23.69 placements (19.99) 9 placements (25th) 18 placements (50th) 33 placements (75th)	13.96 placements (14.53) 5 placements (25th) 9 placements (50th) 18 placements (75th)	1.03 (1.02–1.03)

 $\it Note. \ ref. = reference \ group. \ Boldface \ indicates \ Wald \ Chi-square \ p-value < .005.$ 

<sup>&</sup>lt;sup>1</sup> Limited to youth with at least one foster care placement at age 10 or older.

<sup>&</sup>lt;sup>2</sup> Generated from logistic model, which controlled for age at the start of the most recent foster care runaway episode.

<sup>&</sup>lt;sup>3</sup> Reference category for each analysis is the absence of a report of that specific type of maltreatment; e.g., zero physical abuse reports for "any physical abuse."

<sup>&</sup>lt;sup>4</sup> To assist with interpretation, readers can use the exponent of an exponent rule, or  $\exp(\beta * 2) = \exp(\beta)^2$ . Compared to youth with one foster care runaway episode, youth with the median number of 16 runaway episodes are at OR = 2.18 (1.87–2.18) times the risk and youth with 29.5 episodes (75th percentile) are at OR = 4.22 (3.18–4.22) times the risk of an HT allegation.

<sup>&</sup>lt;sup>5</sup> Compared to youth with one placement, youth with the median number of 18 placements are OR = 1.70 (1.43–1.70) times the risk, and youth with 33 placements (75th percentile) are at OR = 2.65 (1.92–2.65) times the risk of an HT allegation.

Table 4
Experiences of youth age 10 and older with one or more human trafficking (HT) allegations while on runaway status, Florida Safe Families Network 2011–2017 (N = 524).

	n (%)	Mean (SD), Median
Age at first HT allegation while on runaway status	15.98 years (1.26), 16.09	
12 years	7 (1.3)	
13 years	25 (4.8)	
14 years	96 (18.3)	
15 years	125 (23.9)	
16 years	130 (24.8)	
17 years	141 (26.9)	
Number of foster care runaway episode prior to episode in which HT allegation recorded		10.61 runaway episodes (14.42), 6
0	77 (14.7)	
1 to 5 times	178 (34.0)	
6 to 9 times	71 (13.5)	
10 or more times	198 (37.8)	
Total number of foster care runaway episodes that include HT allegations		1.42 allegations (0.79), 1
1	376 (71.8)	
2	99 (18.9)	
3 or more	49 (9.3)	
Number of HT allegations prior to first HT allegation while on runaway status		0.42 allegations (0.78), 0
First HT allegation occurred while on runaway status	368 (70.2)	
1 prior HT allegation	111 (21.2)	
2 or more prior HT allegations	45 (8.6)	
Placement at the time of prior allegation(s)		
Prior allegation while in foster care placement	61 (39.1)	
Prior allegation while not in foster care placement (i.e., living at home)	82 (52.6)	
Prior allegations while both in and outside of foster care placement	13 (8.3)	
HT allegations subsequent (within 1 year) to first allegation that occurred while on runaway status 1		0.51 allegations (0.88), 0
No additional HT allegations recorded	256 (66.8)	
1 additional HT allegation recorded	80 (20.9)	
2 additional HT allegations recorded	30 (7.8)	
3 or more HT allegation recorded	17 (4.4)	

<sup>&</sup>lt;sup>1</sup> Sample for this analysis includes 383 youth age 16 or younger at the time of their first HT allegation while on runaway status. Youth age 17 at the time of their first HT allegation while on runaway status were excluded to avoid biases created by the inability to follow youth a full year (during which time they will have aged out of the child welfare system's supervision). Nonetheless, analysis of the 141 17-year-olds excluded from presentation in the table indicates a relatively similar pattern: before their 18th birthday, 79.4% (n = 112) of youth experienced no additional HT allegations, and 15.6% (n = 22) of youth experienced one additional HT allegation.

youth (15%) experienced HT the first time they ran from foster care; most youth had prior runaway episodes without trafficking allegations, with more than a third having run from foster care more than 10 times. This is consistent with literature indicating heightened risk for delinquency and substance use outcomes with repetitive (more than once; Courtney & Zinn, 2009; Tyler & Bersani, 2008), and chronic (more than six times; Jeanis, 2017) runaway behavior.

For most (70%) youth with a HT allegation during runaway status the first identified trafficking allegation occurred during a foster care runaway episode. Of course, in the context of this discussion it is important to note that it is possible that youth had prior HT experiences that were not reported to authorities. Drawing from the broader field, many cases of abuse are known by the victimized child only (McElvaney, 2015) or are never reported to authorities, even by mandated reporters (Sedlak et al., 2010). Use of missing child protocols (such as those used in Florida) which include assessment of the youth's experience while absent from foster care may offer an opportunity for youth disclosure, particularly if the caseworker conducting the assessment or interview takes a trauma-informed, victim-centered approach (Simich, Goyen, Powell, & Mallozzi, 2014). Florida's central region uses a missing teen debriefing form that not only includes questions about abuse experienced and obtainment of food, shelter, and clothing while away, but also elicits youth perspective (e.g., What can we do to help improve the situation so that you don't feel like you need to run in the future?), which may help build trust needed for disclosure. (Other regions use similar forms.) It is also possible that when youth are debriefed about experiences while on runaway status they may disclose past exploitation (i.e., prior to running from foster care). Mixed-methods research and/or implementation and subsequent analysis of data fields that capture estimated dates of victimization (in addition to dates of the report) can help increase confidence in our findings.

Furthermore, we found that approximately 67% of youth with an HT allegation during a runaway episode did not have any additional HT allegations up to a year later (either while in foster care - including during a runaway episode, or outside of a child welfare placement). This may potentially indicate successful implementation of HT-specific intervention services (e.g., better matched placement, mental health treatment). Indeed, the sex trafficking provisions of the PSTFA require that agencies determine the factors that led to the child being absent from foster care, and, to the extent possible, address those factors in subsequent placements. Nonetheless, it is important to note that more than 33% of youth went on to have a subsequent HT allegation within a year following the first allegation recorded while on runaway status. Post-hoc analyses indicate that subsequent allegations are recorded a median of 104 days (or, about 3.4 months) after the initial allegation. It is possible that this relatively short amount of time indicates subsequent victimization experiences that are connected to the first (i.e., through continued contact with the perpetrator), although we were unable to examine this empirically.

Further, as noted, a sizeable proportion of youth went onto have additional child maltreatment allegations. The group differences for sexual abuse were particularly pronounced; youth with HT allegations while on runaway status were more than three times as likely to have a subsequent report of sexual abuse than were youth without an HT allegation while on runaway status. This finding is concerning, especially in light of work suggesting that youth who have experienced sexual abuse (vs. other forms of maltreatment) are likely to experience lower rates of exits to adoption and reunification (Connell et al., 2006). The multiple types of victimization (or polyvictimization) experienced by youth in our sample may increase risk for long-term and unstable stays

in foster care. The child welfare placement trajectories of youth who experience HT during a runaway episode will be important for future work to explore.

In general, findings suggest that stabilizing foster care placements and preventing runaway episodes may be important strategies to reduce HT victimization among youth in care. Importantly, the goal of addressing runaway behavior among youth in foster care is not only to reduce the rate and duration of runaway episodes, but to also stabilize youth in settings that meet their needs (e.g., access to family or other preferred individuals through safe visitations, promotion of the development of strong social networks at school or through extracurricular activities: Clark et al., 2008). Although the current body of evidence on research-informed run prevention and reduction programs is quite preliminary, two approaches that focus on eliciting and meeting youth's developmental needs show promise: a functional, behavior analytic approach, the Behavior Analysis Services Program (Clark et al., 2008) and a trauma-informed, developmentally focused program, Children and Residential Experiences (Izzo et al., 2016). Several states have also developed innovative developmentally-focused approaches that focus on building relationships between youth and trusted adults - consistent with emerging work indicating that the presence of a supportive adult is protective against trafficking experiences (Chisolm-Straker, Sze, Einbond, White, & Stoklosa, 2018). For example, the Delaware Division of Family Services uses a targeted approach to youth who run away from foster care. Department Special Investigators search for youth physically and through social media, travel to bring the youth back to Delaware (if out of state) and continue to provide mentorship and support once the youth is returned (Delaware Department of Services for Children, Youth and Families, 2016). Harm reduction approaches, such as those that provide youth with safe resources to which they can turn while absent from foster care, may be another part of the "prevention puzzle" (DeGue et al., 2014). For example, Hawaii provides vouth who have had one or more prior unauthorized absences from foster care with a safety card detailing who they can contact for help while on the run, such as Planned Parenthood and the National Runaway Safeline (Hawaii Department of Human Services, n.d.).

#### 5.3. Strengths and Limitations

The implications of the present study are bolstered by the use of a large administrative child welfare dataset involving lifetime histories for a 7-year birth cohort of youth with at least one stay in foster care at age 10 or older. As noted, Florida's response to HT of youth predates the PSTSFA and as of early 2018, represents one of only a few states recording HT allegations. Thus, this dataset thus represents a rare opportunity to answer even basic questions regarding HT among the child welfare population. The present study is the first to use comparison groups to examine key child, maltreatment and placement characteristics associated with youth who run away from foster care and HT allegations recorded while youth are on the run. This represents a substantial contribution to a literature where our understanding of trafficking of youth who run away from foster care has been drawn primarily from qualitative studies, quantitative work using purposive sampling of trafficked youth/young adults or runaways, and descriptive studies without a comparison group.

However, a number of limitations suggest caution about the study's conclusions. First, these data should not be interpreted as the prevalence of HT that occurs during runaway episodes. As noted by Gibbs et al. (2018), identification of HT is dependent on the ability of first responders such as child welfare, medical and law enforcement personnel, as well as the skills of caseworkers who investigate and assess allegations. The number and characteristics of victims are likely to shift as awareness, screening and identification of victims evolve.

Second, data used were abstracted from an administrative database. The limitations of child welfare administrative data are reviewed more thoroughly elsewhere (e.g., Drake & Jonson-Reid, 1999), including data

elements that are typically fairly narrow in focus, evolution of data elements over time, the absence of key factors known to be associated with both runaway behavior and HT victimization (e.g., lesbian, gay, bisexual, transgender and queer [LGBTQ] identity; Keuroghlian, Shtasel, & Bassuk, 2014; Warf et al., 2013) and potential concerns over data quality. In addition to future work exploring additional variables (e.g., LGBTQ identity, separate examination of sex and labor trafficking), the use of multiple data sources, such as those pulled from runaway and homeless youth programs, may help describe a more complete picture of the key factors placing youth at risk for HT during runaway episodes.

Third, and related to the above described limitations of administrative data, the present study is largely observational. In some instances, we were able to establish temporal order (e.g., child maltreatment allegations occurring before and/or after first HT allegation during a runaway episode; see Table 4) but were unable to do so for all variables. For example, we were unable to describe when youth met the trafficking perpetrator (i.e., before or during the runaway episode). Along these lines, recent work (O'Brien et al., 2017) indicates that HT victimization also serves as a risk factor for running from foster care (i.e., foster youth with a history of sex trafficking victimization were more likely to report running from foster care than those without such history). The relationship between trafficking and running from foster care may be bidirectional, with each factor increasing the risk of the other. In this sense, running from foster care may perpetuate a dangerous cycle of subsequent victimization and subsequent running. Future research should consider disentangling the relationships among runaway episodes, HT, and as noted earlier, "push" and "pull" factors associated with running.

Despite these limitations, the present study provides an important "first look" at the intersection between foster care runaway episodes and HT. Evidence from this large cohort of youth suggests that stabilizing foster care placements may impact both runaway behavior and HT victimization experienced while on runaway status. Future mixedmethods research and developmentally sensitive analyses focused on temporality can aid in our understanding of the intersection between child, maltreatment and placement characteristics and HT experienced among foster care runaways. With greater understanding, more effective interventions aimed at preventing the onset and reoccurrence of both runaway behaviors and HT victimization can be developed.

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#### Disclaimer

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