Screening for human trafficking among homeless young adults

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ABSTRACT

Human trafficking is a public health issue affecting homeless young adults across the United States; however, screening tools for trafficking specifically for this population are lengthy and onerous. The aim of this study was to develop a sensitive, brief, and user-friendly trafficking screening tool for homeless young adults. Five candidate items for the screening tool were identified from the Vera Institute's Trafficking Victim Identification Tool (TVIT). Study participants were asked the five candidate items, and then received a trafficking assessment using the Human Trafficking Identification and Measurement (HTIAM-14), which is validated for the homeless youth population. A multivariable logistic model was used to analyze the five candidate items in relation to a trafficking experience on the longer HTIAM-14. Homeless people, aged 18 to 22 years old, receiving support from Covenant House New Jersey were eligible to participate in the study. Over 15 months in 2015–2017, 340 trafficking assessments were performed for 307 participants; 8.8% (30) of the assessments revealed a human trafficking experience. Of assessments identifying a trafficking experience, 66.7% (20) found sex trafficking and 46.7% (14) labor trafficking, with 16.7% (5) demonstrating both forms of trafficking. We validated a new screening tool, Quick Youth Indicators for Trafficking (QYIT). QYIT allows providers to screen for trafficking among homeless young adults; an affirmative answer to at least one QYIT question is 86.7% sensitive and 76.5% specific in identifying a trafficking experience. QYIT is the first highly sensitive, comprehensive trafficking screening tool that is truly brief and does not require a trafficking expert to administer. Use of QYIT at appropriate agencies will enable social service providers to systematically detect and serve homeless young adults who have labor and/or sex trafficking experiences.

1. Introduction

1.1. Defining human trafficking

Often called "modern day slavery," human trafficking is a human rights violation and a clear manifestation of injustice. The United States (U.S.) federal definition of trafficking is: The recruitment, harboring, transportation, provision, and/or obtaining of a person for:

1. Labor or services, through the use of force, fraud, or coercion for the purpose of involuntary servitude, peonage, debt bondage or slavery.
2. Commercial sex act(s) through the use of force, fraud, or coercion.
3. Any commercial sex act if the person is under 18 years of age, regardless of whether any form of force, fraud, or coercion is involved (Victims of Trafficking and Violence Protection Act of 2000, aka TVPA).

Under U.S. federal law, *any* minor—regardless of third-party involvement, emancipation status, or age of other participating parties—engaged in any kind of commercial sexual activity (including child abuse imagery[1]), is considered a survivor of sex trafficking. Therefore, according to U.S. federal law there are no "child prostitutes." *This article is about labor and/or sex trafficking, together called "human trafficking" as per the federal definition above. Throughout this article we will refer to "trafficking" to include both labor and sex trafficking.*[2]

1.2. Trafficking prevalence

In the early 2000's, the U.S. Department of State estimated 14,500 to 50,000 people were trafficked into the United States annually; but these broad ranging estimates did not take into account those trafficked into the nation in other years; those that entered the country via other mechanisms (e.g. smuggling or on a visa) and were subsequently trafficked; and U.S. citizens and lawful permanent residents (LPR) who were trafficked within homeland borders (US Department of State, 2002; US Department of State, 2006). In San Diego county alone, for example, one study estimated that in a year, 38,000 people are affected by trafficking (Zhang, 2012). In a separate study, in the state of Texas, an estimated 313,000 are affected (Busch-Armendariz et al., 2016). These local estimates outnumber previous national estimates, making it

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apparent that the national prevalence of human trafficking is not yet clearly understood. Trafficking prevalence estimates vary widely based upon methodology, definition used (e.g., U.S. state definition, TVPA definition, United Nations definition), local capacity to investigate concerns of trafficking, and so on (Fedina & Deforge, 2017; Galma & Finckenauer, 2005; Weitzer, 2014). And given the criminal nature of trafficking, truly accurate estimates of those affected cannot be known (Farrell, McDevitt, & Fahy, 2010; Farrell & Pfeffer, 2014; Farrell & Reichert, 2017; US Department of State, 2002, 2006). It is outside the scope of this article to scrutinize prevalence estimates and their study methodologies; suffice to say, there are at least thousands of people in the U.S. impacted by human trafficking, and more work is needed to better delineate a scientifically rigorous and reproducible method of estimation.

1.3. Homeless youth are vulnerable to trafficking

In recent years, increased attention has been drawn to the vulnerability of homeless youth to being trafficked. Here the term "youth" is inclusive of minors (under 18 years) and young adults (18–26 years). Much of the attention has focused on sex trafficking, though increasingly there is evidence that youth who are trafficked experience labor trafficking in significant proportions (Chisolm-Straker, Sze, Einbond, White, & Stoklosa, 2018; Murphy, 2017; Murphy, Taylor, & Bolden, 2015). According to the National Academy of Medicine (formerly the Institute of Medicine), homeless youth who are U.S. citizens and residents are at particular risk of being trafficked (Dank et al., 2017; IOM, 2013). This makes sense, as homeless youth (like all people) require shelter, food, clothing, and a feeling of connection to others. While trafficking is a form of extreme exploitation, it may offer these basic necessities to homeless youth. In 2017, > 441,000 minors were missing in the U.S. (National Crime Information Center, 2017); that is to say, according to the Federal Bureau of Investigation's electronic database, at least 441,000 children were at *risk* of being trafficked last year, as they lacked traditional means of meeting their basic needs. In addition to the above discussion, further complicating the quantification of those trafficked is that unaccompanied and separated youth are infrequently captured in formal, systematic assessments (Stark et al., 2016). To address this quantification gap, Covenant House, an international federation serving homeless young adults, conducted studies about trafficking at their sites in New York (in 2013) and New Orleans (in 2015). These studies found that 14 to 15% of their homeless young adult clients were being trafficked or had experienced trafficking at some point in their life (Bigelsen & Vuotto, 2013; Murphy et al., 2015).

1.4. Methods to identify trafficked young people

It is important to identify trafficked homeless youth, as they have experienced a unique complex trauma and may have unique needs, not shared by their un-trafficked homeless peers. But because the life experiences postulated to be risk factors for trafficking (e.g., child maltreatment, foster care involvement) are not uncommon among homeless young adults (Bigelsen & Vuotto, 2013; Chisolm-Straker et al., 2018; IOM, 2013; Murphy et al., 2015; Reid, Baglivio, Piquero, Greenwald, & Epps, 2017), the ability to screen for trafficking is useful for those serving the homeless young adult population. Unfortunately, currently available validated screening instruments are onerous to administer. Vera Institute's Trafficking Victim Identification Tool (TVIT), a validated social service instrument to screen adults for human trafficking, can take 60 min to administer and requires a human trafficking expert for interpretation (Simich, Goyen, Powell, & Mallozzi, 2014). The Human Trafficking Interview and Assessment Measure (HTIAM-14) is a validated screening tool to evaluate for trafficking among the homeless young adult population (Bigelsen & Vuotto, 2013), but it can take up to 45 min to administer and also requires an interviewer with human trafficking expertise. This level of training and amount of time is

not pragmatic for many organizations serving homeless young adults.

Importantly, sound screening tools are validated against a logical or gold standard, not expert opinion; a gold standard test is considered definitive (Greenhalgh, 1997; Maxim, Neibo & Utell, 2014). Validation of a tool is important because it tells the user that the test actually measures what it purports to measure. Of note, Greenbaum, Dodd, and McCracken (2015) developed a short, relatively user-independent screening tool for the recognition of trafficking, but this tool is specific to health care settings, focuses on expert-defined "high risk" chief complaints or clinician gestalt, evaluates patients aged 13–17 years, and does not evaluate for labor trafficking.

Screening tools, assessment instruments, and protocols are often conflated, but their methods, purposes, and resultant implications are vastly differing. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), a screening tool is systematically applied to an entire group, in an effort to identify the possible presence of an experience, problem, or entity (Maxim, Neibo & Utell, 2014; SAMSHA, 2009; Stoto, Almario, & McCormick, 1999). Often the term "screening" is used when service providers, for example, are assessing for something based upon a suspicion. The correct use of the term however, is when a tool or test is applied to a specific population, *regardless* of suspicion or concern. Appropriate use (among all-comers of a population) of a highly sensitive and specific screening tool could provide information about the prevalence of an experience, problem, or entity among a specific group. For example, the U.S. Preventive Services Task Force recommends clinicians screen all women of childbearing age for intimate partner violence (USPTF, 2013). In this way, an entire group could be systematically screened for a traumatic experience, regardless of their clinical presentation, and regardless of a caregiver's bias. Used appropriately, the results of such screening would give communities information about how many women-identified patients, of childbearing age, report experiencing intimate partner violence. Such data contributes to the evidence-based development of relevant prevention and intervention efforts.

2. Objective

This investigation aimed to develop a simple, rapid tool for social service agencies to screen for human trafficking (i.e., labor and/or sex trafficking) experiences among homeless young adults. Such a tool would allow service providers to quickly screen all clients for a trafficking experience and determine which clients require a more time-consuming, expert assessment for trafficking. The purpose of screening for trafficking is to connect affected young adults with needed services, so this study also aimed to determine if homeless young adults with a trafficking experience have different needs than peers without a trafficking experience.

3. Material and methods

3.1. Setting and participants

Screening tool development and validation was part of a multi-objective study that examined trafficking experiences among homeless young adults, and associated various outcomes (Chisolm-Straker, Sze, Einbond, White, & Stoklosa., 2018). The study team consisted of Icahn School of Medicine at Mount Sinai researchers, and clinical and leadership staff at Covenant House New Jersey (CHNJ), a multi-site non-governmental service organization. Young adults were eligible for participation if they were clients of CHNJ, an open-intake service provider for homeless young people in New Jersey. CHNJ serves homeless young adults in three settings (two urban, one oceanside town) with comprehensive services, including shelter, food, legal aid, healthcare referrals, and educational assistance. If young adults were homeless, aged 18 to 22 years old, and CHNJ had the capacity to meet their needs, they were eligible to participate in the study. Because

homeless young adults that left CHNJ were at high-risk for experiencing trafficking while away from services, client-participants that left CHNJ after completion of this part of the study but later returned to CHNJ were eligible to participate in the screening tool development and validation part of the study again.

3.2. Ethics

An information sheet about the study was offered to all participants and written consent was waived to protect participant identity. All clients received an assessment for human trafficking experiences using the longer HTIAM-14 as part of CHNJ standard practice; only those who consented to share their de-identified data with the researchers were included in the study. The Institutional Review Board at the Icahn School of Medicine at Mount Sinai deemed the study exempt from review, as the researchers could only view de-identified data. No remuneration was provided to study participants.

3.3. Study tools

Data collection occurred using ETO (Efforts to Outcomes), a secure, electronic data collection platform. Five candidate items for the screening tool were identified from the TVIT; conversational or "youth-friendly" language from the HTIAM-14 was added:

1. It is not uncommon for people to stay in work situations that are risky or even dangerous, simply because they have no other options. Have you ever worked, or done other things, in a place that made you feel scared or unsafe?
2. In thinking back over your past experiences, have you ever been tricked or forced into doing any kind of work that you did not want to do?
3. Sometimes people are prevented from leaving an unfair or unsafe work situation by their employers. Have you ever been afraid to leave or quit a work situation due to fears of violence or threats of harm to yourself or your family?
4. Some employers think that in exchange for the work their employees do, they can pay them in other ways even though they've never gotten their permission. Has someone you worked for ever controlled the money you earned, or kept money you earned in exchange for transportation, food, or rent without your consent?
5. Sometimes young people who are homeless or who are having difficulties with their families have very few options to survive or fulfill their basic needs, such as food and shelter. Have you ever received anything in exchange for sex (e.g.: a place to stay, gifts, or food)?

These questions were selected as possible screening tool questions because subjects with affirmative replies to these items had the highest odds ratios of screening positive for a labor and/or sex trafficking experience on the complete TVIT (Simich et al., 2014). The study's Advisory Board (see Acknowledgements) confirmed item relevance. The five candidate items were also present within HTIAM-14 itself. Study participants were first asked the five candidate items, and then received the longer, HTIAM-14, for (labor and/or sex) trafficking determination. All participants, regardless of HTIAM-14 outcome, were asked what types of services would be useful to them. They first shared needs in their own words, and then were prompted with items from a pre-determined list (see Fig. 1).

3.4. Study protocol

Data collectors were CHNJ staff, all of which had previously conducted assessments of CHNJ clients and received extensive training on recognizing human trafficking from a nationally-recognized trafficking expert (MCS). In Step 1 of the study protocol (see Fig. 2), participants were asked the candidate screening questions; this occurred in the first
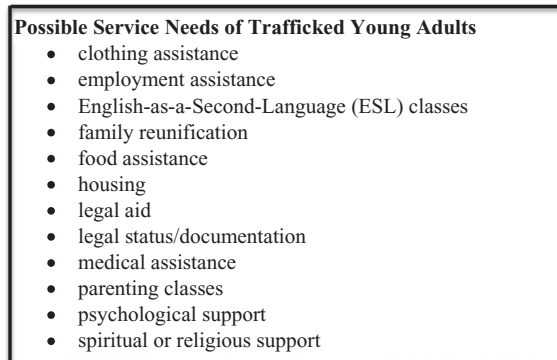
Possible Service Needs of Trafficked Young Adults
- clothing assistance
- employment assistance
- English-as-a-Second-Language (ESL) classes
- family reunification
- food assistance
- housing
- legal aid
- legal status/documentation
- medical assistance
- parenting classes
- psychological support
- spiritual or religious support

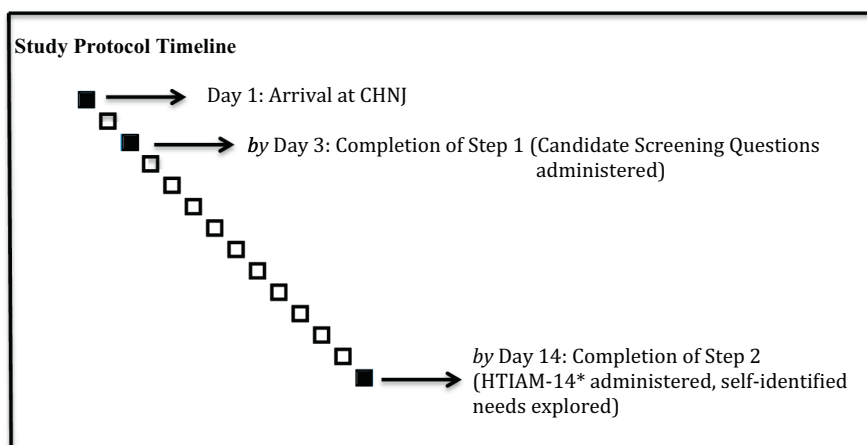**Fig. 1.** Possible service needs of trafficked young adults.

three days of a study participant's stay at CHNJ. In Step 2 of the study protocol (and as part of standard practice), staff administered the HTIAM-14 and asked about self-identified needs; this occurred in the first 14 days of the participant's stay at CHNJ. Because these two study steps could be temporally spaced by days, all clients were consented at both steps of the study. If a participant only consented to share de-identified data from Step 2 their data was not used for tool development and validation, only for examination of self-identified needs based upon trafficking experience. In addition to the usual care, young adults that screened positively for trafficking on HTIAM-14 (Step 2) were offered an additional legal needs assessment and referrals as appropriate.

3.5. Analysis

Data were analyzed via Stata 15.1 (StataCorp, 2017). Descriptive statistics were calculated for demographic variables of participants. A logistic regression model of the five candidate items was run, with the dichotomous outcome of trafficking experienced or not experienced based on HTIAM-14 assessment. Of note, participants who left and returned to CHNJ could have more than one unique Step 1 – Step 2 pairing (see Fig. 2). From the five candidate items we identified 2 screening questions that were significant. To locate items that were significant in the eight main constructs of the complete HTIAM-14, we also ran a logistic regression model with (1) unsafe/coercive work environment; (2) forced work/labor; (3) continuing work despite misleading work/payment expectations; (4) fear of quitting/leaving; (5) improper payment; (6) isolation; (7) concealed work; (8) force, fraud, coercion in commercial sexual activity. From the eight main constructs, we identified the next two best questions. Finally, we used various combinations of the five candidate screening items and the aforementioned constructs to calculate the area under the curve (AUC) to evaluate the performance of the different item sets in terms of sensitivity and specificity (Bewick, Cheek, & Ball, 2004). Sensitivity, specificity, and positive and negative predictive values for item combinations were used to determine the new screening tool's composition. A chi square test of independence was calculated to compare the frequency of self-identified needs of study participants based upon trafficking experienced or not experienced.

4. Results

From November 2, 2015 through February 21, 2017, 307 participants completed Steps 1 and 2 of the study, at least once. Of the 307 participants' first or only assessments, 9.5% (29) were found to have had a human trafficking experience (see Table 1). The 307 participants were largely young adults of color, with < 20% identifying as white; 1.6% identified as having a transgender or gender nonconforming (TGGNC) life experience. The average age of participants was 19.5 years old. Of those who had a trafficking experience, about half

Study Protocol Timeline

Day 1: Arrival at CHNJ

by Day 3: Completion of Step 1 (Candidate Screening Questions administered)

by Day 14: Completion of Step 2 (HTIAM-14* administered, self-identified needs explored)

* HTIAM-14: Human Trafficking Interview Assessment Measure

Fig. 2. Study protocol timeline.

Table 1
Study participant characteristics.

Descriptor	Percentage (n = 307)
Race/Ethnicity[a]	
Black	66.8% (205)
Latino	26.7% (82)
White	17.6% (54)
Asian/American	0.7% (2)
Native American	0.7% (2)
Other	13.4% (41)
Gender	
Female	50.5% (155)
Male	47.9% (147)
TGGNC	1.6% (5)
LGBQ +[b]	13.4% (41)
Age	
18 years old	22.8% (70)
19 years old	28.3% (87)
20 years old	27.4% (84)
21 years old	20.5% (63)
22 years old	1.0% (3)
Age Left Home[c]	
< 10 years old	2.6% (8)
10–13 years old	11.7% (36)
14–17 years old	40.1% (123)
≥18 years old	25.4% (78)
Trafficked*	9.5% (29)
Sex trafficked	69.0% (20)
Labor trafficked	48.3% (14)
Sex and labor trafficked	17.2% (5)

  [a] Not mutually exclusive.
  [b] Lesbian, Gay, Bisexual, Questioning, Pansexual, and other non-heterosexual sexualities.
  [c] Participants left home in a variety of ways, including being removed from the home, kicked out, and running away.

(48.3%) experienced labor trafficking. Labor trafficking survivors described being made to steal/shoplift, sell illicit drugs, and work in the fast food industry, among other forms of exploitation. And—as labor and sex trafficking are not mutually exclusive—17.2% of those trafficked experienced both labor and sex trafficking.

Of the 307 participants, 31 participants left and returned to CHNJ during the study period, so they had more than one unique Step 1 – Step 2 pairings. These 31 participants' demographics were not statistically significantly different from the other participants who only had one Step 1 – Step 2 pairing. This resulted in a total of 340 unique Step 1 – Step 2 pairings, from which QYIT was developed. Of the 340 assessments, 8.8% (30) assessments revealed a trafficking experience. One person was trafficked between their CHNJ presentations, resulting in a

negative assessment the first time they participated in the study, and a positive assessment subsequently.

4.1. A new screening tool: Quick Youth Indicators for Trafficking (QYIT)

Candidate items 3 and 5 were significant at the 0.05 level or better (*p*-value 0.000), for a positive screen on the HTIAM-14. However, together these two items only yielded a sensitivity of 66.7%. Combinations of all candidate items were examined for a QYIT-sensitivity that was > 79% but would not consequently result in administration of HTIAM-14 to the majority of young adults screened. Analysis of trafficked young adults *not* identified by candidate items 3 and 5 also included review of the entire HTIAM-14. The addition of candidate item 1 and another question from HTIAM-14 (not among the hypothesized five) resulted in a tool sensitivity of 86.7%. Overall, an affirmative answer to at least one QYIT question (see Fig. 3) was 86.7% sensitive in identifying a trafficking experience; the AUC is 0.87 (see Fig. 4) and QYIT has a specificity of 76.5% (see Table 2). QYIT's sensitivity was not different based on gender. While the candidate questions were hypothesized based upon TVIT, the final QYIT items are all found in HTIAM-14, which was previously validated in a similar study population (young adults with a homeless experience, seeking services). Table 3 shows logistic regression results from the final QYIT items based on the trafficking determination from HTIAM-14.

Four participants who had previously answered "no" to the first three QYIT items (posed as candidate screening questions), answered "yes" to at least one of those same questions when administered during Step 2. Three of these four participants were sex trafficked, and the other was labor trafficked. The prevalence of trafficking in the study population is low—it does not affect most or even half of the homeless young adults served—hence the positive predictive value (PPV) of QYIT is also low if the respondent answers only one question affirmatively. As the number of affirmative answers approaches four, the PPV increases. With an affirmative answer to only one of the QYIT questions (score of one) the PPV of QYIT is 26.26%, meaning that many of those with a score of one, though screening QYIT-positive, will not actually have a trafficking experience.

Upon CHNJ social workers' qualitative review of data for those with QYIT false-positives about a third of assessments revealed severe abuse, survival sex,[3] or another form of exploitation that was clinically relevant. No additional items from HTIAM-14 proved useful in decreasing

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  [3] Survival sex is defined as when adults (18 years or older) engage in sex acts in exchange for resources, such as shelter or food, because they cannot otherwise access these basic necessities.

Quick Youth Indicators of Trafficking (QYIT)

1. It is not uncommon for young people to stay in work situations that are risky or even dangerous, simply because they have no other options. Have you ever worked, or done other things, in a place that made you feel scared or unsafe?

2. Sometimes people are prevented from leaving an unfair or unsafe work situation by their employers. Have you ever been afraid to leave or quit a work situation due to fears of violence or threats of harm to yourself or your family?

3. Sometimes young people who are homeless or who have difficulties with their families have very few options to survive or fulfill their basic needs, such as food and shelter. Have you ever received anything in exchange for sex (e.g.: a place to stay, gifts, or food)?

4. Sometimes employers don't want people to know about the kind of work they have young employees doing. To protect themselves, they ask their employees to lie about the kind of work they are involved in. Have you ever worked for someone who asked you to lie while speaking to others about the work you do?

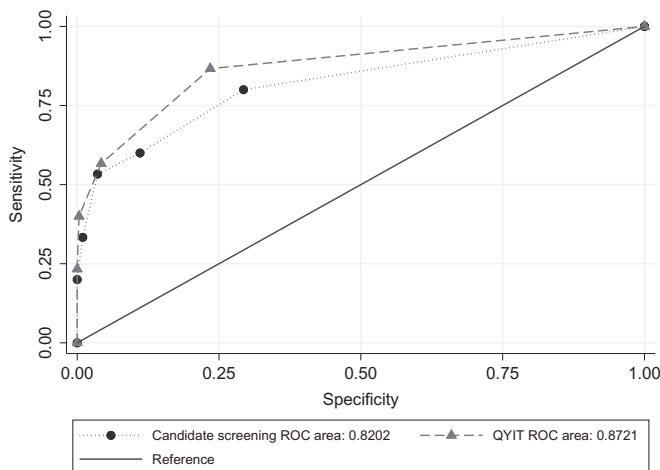**Fig. 3.** Quick Youth Indicators of Trafficking (QYIT).

Candidate screening ROC area: 0.8202 — QYIT ROC area: 0.8721
Reference

Fig. 4. Area under the curve.

Table 2
QYIT tool sensitivity, specificity, positive predictive value and negative predictive values.

	Sensitivity	Specificity	Positive predictive value	Negative predictive value
Score of ≥1	86.67%	76.45%	26.26%	98.34%
Score of ≥2	56.67%	95.81%	56.67%	95.81%
Score of ≥3	40.00%	99.68%	92.31%	94.50%
Score of 4	23.33%	100.00%	100.00%	93.09%

Model AUC (Area Under the Curve) of 0.8721.

the false positive rate of the 4-item QYIT.

4.2. Self-identified needs of trafficked young adults

Some CHNJ clients only consented to sharing their de-identified data at Step 2 of the study, resulting in a total of 365 participants who shared their HTIAM-14 Assessment and self-identified needs data. Of the 58 participants who chose to share their HTIAM-14 results with researchers but not participate in Step 1 of the study, 10.3% (6) were found to have had a trafficking experience, based on the HTIAM-14 assessment. These 58 participants' demographics were not statistically significantly different from participants who participated in both Step 1 and Step 2 of the study.

Table 3
Logistic regression of QYIT items.

Variables	OR of trafficking determination on HTIAM-14
Have you ever been afraid to leave or quit a work situation due to fears of violence or threats of harm to yourself or your family?	10.48* (5.133) 4.010–27.37
Have you ever received anything in exchange for sex?	14.17* (9.488) 3.815–52.64
Have you ever worked for someone who asked you to lie while speaking to others about the work you do?	28.24* (19.75) 7.169–111.2
Have you ever worked, or done other things, in a place that made you feel scared or unsafe?	1.357 (0.860) 0.392–4.701
Constant	0.0170* (0.00758) 0.00709–0.0408
Observations	340

Odds Ratio (*p < .01).
Robust standard errors in parentheses.
Confidence interval.

Study participants with a trafficking experience expressed similar needs to those not trafficked, but there were some areas of difference (see Table 4). Participants with any type of trafficking experience were more likely to report needing parenting classes (p < 0.02) and psychological support (p < 0.01). Many of the trafficked young adults who identified parenting classes as a need were not already enrolled in such classes and did not have custody of their children. Participants who were labor trafficked were more likely to need family reunification (p < 0.046), English-as-a-Second-Language (ESL) classes (p < 0.02), and psychological support (p < 0.03) than those who were not labor trafficked (those who were not trafficked at all, or those who were sex trafficked). Those who were sex trafficked were more likely to report needing parenting classes (p < 0.04) than those who were not sex trafficked (those who were not trafficked at all, or those who were labor trafficked).

5. Discussion

5.1. A truly rapid, user-independent screening tool

In this 15-month study of 340 assessments of homeless young adults, 8.8% (30) were positive on HTIAM-14 for a trafficking

Table 4
Self-identified needs of homeless young adults, by trafficking experience.

N = 365	Not trafficked	Trafficked	P-value	Sex trafficked	P-value	Labor trafficked	P-value
Clothing assistance	47.1	55.6	0.34	62.5	0.14	52.9	0.67
Education assistance	63.5	58.3	0.54	54.2	0.35	70.6	0.51
Employment assistance	73.6	86.1	0.10	87.5	0.14	88.2	0.19
Food assistance	76.9	77.8	0.91	75.0	0.81	82.4	0.59
Housing	86.3	86.1	0.97	91.7	0.43	82.4	0.63
Family reunification	13.7	13.9	0.97	4.2	0.16	29.4	0.05
Legal aid	28.0	36.1	0.31	29.2	0.96	47.1	0.09
Medical assistance	45.6	47.2	0.85	33.3	0.21	58.8	0.27
Parenting classes	13.4	27.8	0.02	29.2	0.04	29.4	0.08
ESL classes[a]	2.4	5.6	0.28	4.2	0.66	11.8	0.02
Status documentation[b]	5.5	8.3	0.48	8.3	0.57	11.8	0.28
Psychological support	48.6	72.2	0.01	66.7	0.11	76.5	0.03
Spiritual/religious support	12.5	19.4	0.24	12.5	0.92	23.5	0.20

[a] ESL = English-as-a-Second Language.
[b] Status documentation = visitor or immigrant status registered with U.S. government.

experience (as per the TVPA definition). This investigation successfully developed and validated Quick Youth Indicators for Trafficking (QYIT), a 4-item tool of dichotomous questions, eliminating the need for an expert to screen every client served for trafficking. QYIT is the first highly sensitive, validated labor and sex trafficking screening tool that does not require a trafficking expert for administration. With a sensitivity of 86.7%, QYIT is useful for agencies serving homeless young adults but possessing limited human resources. Homeless young adults who screen positive on QYIT should receive a comprehensive assessment for trafficking experiences using the TVIT, HTIAM-14, or a service provider with trafficking expertise.

Because a good screening tool must have a high sensitivity (SAMHSA, 2009), the investigative team focused efforts here. However, appreciating that many agencies serving homeless young people are resource-limited, we also aimed to develop a tool that did not frequently result in false positives. While QYIT over-identifies trafficking among homeless young adults, a substantial portion of those who were false positives for a trafficking experience have other trauma and/or exploitation histories that merit the resultant more in-depth interview with clinical staff.

QYIT is comprised of three questions that were hypothesized to be useful for a short screening tool and one question that was not a postulated candidate item. All items are embedded in HTIAM-14, but all four were not administered as a complete unit during Step 1 of the study protocol. More research is needed to evaluate the performance of QYIT as a cohesive entity. Still, the five candidate items were a longer unit than QYIT, and administering staff found the longer item-set easy to use, an acceptable length, and well received by participating young adults.

5.2. Consideration of screening timing

As with any tool that relies upon the respondent to disclose, the respondent must be ready to share information with the person asking. Previous studies observed that disclosure of a trafficking experience benefits from a pre-existing, strong client-interviewer relationship, so that young adults can become comfortable sharing difficult information (Bigelsen & Vuotto, 2013; Murphy et al., 2015). This may be why during Step 2, up to two weeks into a participant's stay at CHNJ when the HTIAM-14 was administered, four participants who had previously answered "no" to QYIT items, then answered "yes" to at least one item found in QYIT. Also, 58 clients did not consent to study participation at Step 1 but did for Step 2. In both cases, it may be that after spending more time with CHNJ staff, they developed a sense of trust in the team. Institutions that employ the use of QYIT may consider administering it at multiple points. Because some young adults may not stay long enough to develop such a relationship, it is important to screen early for

those who are ready to share. As well, re-administering QYIT later in the therapeutic relationship to young adults who initially screened negative may allow another opportunity for trafficked clients to be identified.

5.3. Survivor needs, relevant services

Agencies serving homeless young adults should be concerned about human trafficking experiences among their clients because these young people may be eligible for additional services (Moore & Dickason, 2017), and may require services that agencies are not already providing. Recognition and certification of trafficking status may be particularly important for undocumented survivors who wish to remain in the United States (Moore & Dickason, 2017). And while study participants reported needing assistance in areas that comprehensive service agencies may already provide (Sanar & Polaris, 2015), they also indicated some unexpected needs. For example, CHNJ provides on-site parenting classes as part of routine programming for clients at its Elizabeth site, which has a "mothers and babies" program. But at the Crisis Centers in Newark and Atlantic City, on-site parenting classes are not routinely offered. Many of the trafficked young adults who identified parenting classes as a need were at these Crisis Centers, did not have custody of their children, and thus were not already participating in such classes. Identifying this need among trafficked young adults served has changed the programming at CHNJ.

Other agencies may also find it necessary to adapt their services when they are able to recognize trafficking and trafficking-specific needs among their population. It is outside the scope of this manuscript to describe what dozens of youth-serving homeless shelters in the U.S. provide for their clients. In describing the needs of this study population, we aim to call attention to the need for each service provider to assess the population(s) it serves. The incorporation of or referral for relevant services, like family reunification or more intensive psychological services, will improve the care that agencies can provide to a marginalized and vulnerable population. Agencies and institutions will not be able to better their service of trafficked young people without screening for the experience itself; QYIT will allow them to tangibly improve upon their practice with relevant programmatic impacts.

5.4. A paradigm expansion

This investigation identified labor trafficking as a major form of exploitation affecting homeless young adults. The national conversation about trafficking, particularly that of young people, has centered on sex trafficking (Albright & D'Adamo, 2017; Bigelsen & Vuotto, 2013; Busch-Armendariz et al., 2016; Friedman, 2013; IOM, 2013; Murphy et al., 2015). Experts note that prior to the enactment of Safe Harbour laws in

some states, many professionals viewed youth in the commercial sex industry as "bad kids" or criminals (Gavin & Thomson, 2017). These laws have helped to shift the conversation, such that minors in the commercial sex industry are more frequently and appropriately understood to be survivors of trauma and/or exploitation.

Similarly, the conversation about youth experiencing other forms of trafficking must change: Youth are also victimized via labor exploitation (Murphy, 2017; Murphy et al., 2015). This study demonstrates that young adults involved in illegal activities and transactions unrelated to commercial sex may also be in exploitative situations. Unfortunately, professionals do not often conceive of these labor activities as possible trafficking situations. When professionals do not recognize all forms of trafficking, they cannot properly assist affected young people (Picarelli, 2015). If agencies serving homeless young adults systematically screen for both labor and sex trafficking using QYIT, they may be able to diminish the selection bias of which survivors are identified and linked to relevant services.

5.5. Limitations and future research

While our results are promising, this study has limitations. Study participants were homeless young people who identified and accessed services. QYIT may not have the same sensitivity among homeless young adults who do not seek or reach social service assistance. Likewise, trafficked homeless young adults who do not reach services may experience labor and sex trafficking in different proportions or have different service needs. Additionally, this study population was largely comprised of young adults of color. QYIT may perform differently, and labor and sex trafficking proportions and survivor needs may be different among a largely white population.

Study participants had to stay up to two weeks to provide data for QYIT development and validation. It is possible that participants who chose not to share their de-identified data or left CHNJ before study completion would have helped further hone QYIT's components; had a different proportion of trafficking experiences; or had different service needs. More research is needed to explore the trafficking types that affect, the self-identified needs of, and how QYIT performs among: homeless young people who are not in a social service setting; white homeless young adults; and short-stay homeless young people who seek services. This investigation was conducted in two cities, Newark and Elizabeth and a fiscally poor, oceanside town, Atlantic City, in New Jersey; the findings of this study may not be generalizable to other settings, like rural and reservation communities. QYIT may be useful in other milieus, like intimate partner violence shelters or healthcare settings, but must be validated and tested for feasibility in these settings first.

6. Conclusions

QYIT is the first validated labor and sex trafficking screening tool that is truly brief and does not require a trafficking expert to administer. It can be used by social service agencies, working with homeless young adults, that have the capacity to offer, or refer QYIT-positive clients for, a more in-depth human trafficking assessment and relevant services. Universal use of QYIT at appropriate agencies will enable social service providers to systematically detect and serve homeless young adults who have labor and/or sex trafficking experiences.

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