

LJMU Research Online

Tejeiro, R, Paramio, A and Ross-Collins, S

Development and Initial Validation of the Trafficking and Human Exploitation Myths Identification Scale (THEMIS)

https://researchonline.ljmu.ac.uk/id/eprint/27386/

Article

Citation (please note it is advisable to refer to the publisher's version if you intend to cite from this work)

Tejeiro, R ORCID logoORCID: https://orcid.org/0000-0003-1181-7123, Paramio, A and Ross-Collins, S (2025) Development and Initial Validation of the Trafficking and Human Exploitation Myths Identification Scale (THEMIS). Journal of Human Trafficking. pp. 1-15. ISSN 2332-2705

LJMU has developed LJMU Research Online for users to access the research output of the University more effectively. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LJMU Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain.

The version presented here may differ from the published version or from the version of the record. Please see the repository URL above for details on accessing the published version and note that access may require a subscription.

For more information please contact researchonline@ljmu.ac.uk



Journal of Human Trafficking



ISSN: 2332-2705 (Print) 2332-2713 (Online) Journal homepage: www.tandfonline.com/journals/uhmt20

Development and Initial Validation of the Trafficking and Human Exploitation Myths Identification Scale (THEMIS)

Ricardo Tejeiro, Alberto Paramio & Scarlet Ross-Collins

To cite this article: Ricardo Tejeiro, Alberto Paramio & Scarlet Ross-Collins (29 Sep 2025): Development and Initial Validation of the Trafficking and Human Exploitation Myths Identification Scale (THEMIS), Journal of Human Trafficking, DOI: 10.1080/23322705.2025.2564612

To link to this article: https://doi.org/10.1080/23322705.2025.2564612

9	© 2025 The Author(s). Published with license by Taylor & Francis Group, LLC.
	Published online: 29 Sep 2025.
	Submit your article to this journal $oldsymbol{\mathbb{Z}}$
hh	Article views: 235
Q	View related articles 🗗
CrossMark	View Crossmark data ☑







Development and Initial Validation of the Trafficking and Human **Exploitation Myths Identification Scale (THEMIS)**

Ricardo Tejeiro (10^a, Alberto Paramio^b, and Scarlet Ross-Collins^a

^aDepartment of Psychology, Liverpool John Moores University, Liverpool, UK; ^bDepartment of Psychology, Universidad de Cádiz, Cádiz, Spain

ABSTRACT

Public understanding of human trafficking is often distorted by persistent myths, hindering victim identification and support. This study presents the development and validation of the first tool with robust psychometric properties designed to measure acceptance of such myths. A total of 421 adults (49.9% female) completed a 25-item questionnaire based on expert consultation and literature review, along with other trafficking knowledge measures; confirmatory factor analysis was then run with an additional 208 participants. The final scale (THEMIS) includes 12 items quantifying myth acceptance and 13 items exploring related aspects. Factor analysis, internal consistency, and validity checks confirmed strong psychometric properties. THEMIS provides a robust, evidence-based tool for research and targeted anti-trafficking interventions. This article supports progress toward United Nations (UN) Sustainable Development Goals (SDGs) 5.2 (aiming to eliminate violence against women and girls, including trafficking and exploitation), 8.7 (eradicating forced labor, modern slavery, and human trafficking, along with the prohibition of all forms of child labor) and 16.2 (ending all forms of violence and torture against children, including abuse, exploitation, and trafficking).

KEYWORDS

Human trafficking; trafficking myths; modern slavery; quantitative research; media influence; psychometric validation

Introduction

The Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime defines human trafficking (HT) in terms of act, means, and purpose, as:

the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. (Article 3)

The United Nations Office on Drugs and Crime (United Nations Office on Drugs and Crime [UNODC], n.d.) further specifies that HT includes a variety of forms, such as sexual exploitation, forced labor, debt bondage, domestic servitude, organ removal, forced begging, the use of child soldiers, and forced marriage.

Although the United Nations definition is widely accepted, the term human trafficking is often used interchangeably with others, such as modern slavery (e.g., Bales, 2011). Some legal jurisdictions introduce distinctions between these terms. For example, in England and Wales, the Modern Slavery Act 2015 (Article 1) states that a person commits the offense of slavery, servitude, and forced

CONTACT Ricardo Tejeiro Department of Psychology, Liverpool John Moores University, Tom Reilly Building, Liverpool L3 3AF, UK

labor if they hold another person in slavery or servitude, or require another person to perform forced or compulsory labor. The interpretation of these terms is guided by Article 4 of the European Convention on Human Rights. The Act further defines HT as the specific situation in which someone "arranges or facilitates the travel of another person ('V') with a view to V being exploited," regardless of whether the travel is international or within a single country (Article 2).

Differences in definitions do little to facilitate the measurement of this multifaceted problem. However, recent estimates indicate that, on any given day, 50 million people are in situations of either forced labor (including commercial sexual exploitation) or forced marriage (International Labour Organization [ILO], 2022). As a recognized global concern, HT is part of both the political and media agenda. Nevertheless, various authors have noted that the debate is hindered by the lack of accurate representation of the phenomena's many facets throughout different stages of social communication.

Beyond the potentially strategic use of terminology to support political agendas (Sharapov et al., 2019), the role of the media in shaping perceptions of HT has been, and continues to be, the subject of debate. News stories on HT are often simplified or distorted (Sanford et al., 2016), relying on outdated mistakes and misconceptions – such as equating all sex work with human trafficking or using movies like *Taken* (Morel, 2008) as constant reference points – that continue to influence policy, media narratives, and public understanding (Brennan, 2017), despite being inconsistent with empirical research (Snajdr, 2013).

While false or inaccurate ideas are often referred to as *misconceptions* (Cambridge Dictionary, n.d.) the term *myth* is frequently used in the literature to describe beliefs that are deeply embedded in society and persist over time, even in the face of contrary evidence. Accordingly, in this work, we use the term *myth* to refer to the erroneous beliefs surrounding HT that we aim to identify and measure.

Several empirical studies have demonstrated the widespread prevalence of HT myths – not only among the general public (Bonilla & Mo, 2018), but also among healthcare providers (Beck et al., 2015), police officers (Farrell & Pfeffer, 2014), prosecutors and judges (Villacampa & Torres, 2017), mandated reporters (Hartinger-Saunders et al., 2017), psychology students (Babu et al., 2024), medical students (Wong et al., 2011), criminal justice students (Salami et al., 2022), and staff at non-governmental organizations (Atauz et al., 2009), among others. These myths can directly impact how society addresses the problem – and how victims experience trafficking and seek help. They often hinder the identification of victims, both by authorities and by the victims themselves. Many do not self-identify because their experiences do not align with popular misconceptions of HT (Hefner & Hill, 2023).

Research also links belief in these myths to increased victim-blaming (Thomas, 2018). Victims who are stereotyped as criminals – such as undocumented immigrants or individuals involved in sex work – may face arrest, detention, or deportation (Clawson et al., 2009). This criminalization fosters fear of law enforcement, discourages victims from seeking medical care, and erodes trust in social services (Gearon, 2019). As a result, only one in 10 HT hotline reports in the UK come directly from victims (Cockbain & Tompson, 2024). Even when cases are reported, authorities may downplay them if they do not fit stereotypical narratives not only regarding victims but also offenders – some of which are more likely than others to be detected and sanctioned (Childress et al., 2024) – resulting in inconsistent responses and missed opportunities to prosecute traffickers (Loyens & Paraciani, 2021). This failure to hold perpetrators accountable enables traffickers to act with impunity and obstructs victim recovery. Survivors are often left to cope with isolation, poor mental health, and the loss of livelihood (Kara, 2009).

Given the widespread impact of HT myths, it is surprising how limited academic attention has been devoted to their measurement. To date, the only established instrument is Cunningham and Cromer's (2016) *Human Trafficking Myths Scale* (HTMS), a 17-item questionnaire developed using responses from university students. Since its publication, the HTMS has been employed in several studies, with reported Cronbach's alpha values ranging from .70 to .82 (Kenny et al., 2023; Litam et al., 2023; Thomas, 2018). However, the HTMS has several limitations that raise concerns about its broader applicability. Notably, Cunningham and Cromer (2016) do not describe the procedure used to

generate the 17 items. Furthermore, participants were asked to read a vignette depicting a case of child sexual trafficking immediately before completing the scale – potentially priming one specific form of trafficking and thereby introducing bias. The reliability assessment is limited to Cronbach's alpha, and although the scale has been described as unidimensional (Litam et al., 2023), neither the original authors nor subsequent researchers have reported any factorial analysis. This is particularly problematic given the scale's internal inconsistency: 15 items address general myths about HT, while two specifically refer to sex trafficking. The scale's validity is also questionable, as it was assessed solely through correlations with participants' perceptions of the vignette's believability and victim culpability. Additionally, the scale references the United States four times, suggesting that some items may lack cross-cultural generalizability.

The HTMS is neither the first nor the only attempt to measure myths or knowledge related to HT. As part of her academic thesis, Schlegel (2015) developed a 15-item true/false scale to assess HT knowledge; however, the instrument demonstrated low internal consistency, with a Cronbach's alpha of .49. Similarly, in a master's thesis, Van Order (2022) developed the *Belief of Human Trafficking Myths Scale*, a 7-item instrument (e.g., "All HT involves commercial sex") using a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). She reported that higher scores were associated with stronger beliefs in a dangerous world and greater knowledge of the criminal justice system. In addition, Fernandes et al. (2020) examined HT myths among students using a 27-item questionnaire; Exeni McAmis et al. (2022) administered a custom survey to healthcare providers; and Tanielian and Tanielian (2019) used a 10-question instrument to assess attitudes – including knowledge – about HT. However, in all these studies, the origin of the items remains unspecified, and none of the authors report psychometric properties such as internal reliability or construct validity. Mobasher et al. (2022) developed a 25-item questionnaire using HT knowledge items adapted from the U.S. Department of Homeland Security's Blue Campaign and the National Human Trafficking Hotline. Yet, similar to the previous studies, they did not report internal reliability metrics.

Some researchers have focused specifically on beliefs related to sex trafficking as a distinct form of HT. Houston-Kolnik et al. (2016) developed the *Sex Trafficking Attitudes Scale* (STAS), drawing on a literature review, input from a community organization working to end HT, and a pilot study with undergraduate students. One of the six components of the scale—*knowledge about sex trafficking*—comprises five items and demonstrated good internal consistency (α = .79), capturing the cognitive dimension of attitudes. Similarly, Simmons et al. (2014) assessed sex trafficking knowledge among nurses using 10 items based on the World Health Organization's guidance on identifying and assessing sexually trafficked victims. Finally, Gonzalez-Pons et al. (2020) adapted the HTMS to specifically measure myths about domestic minor sex trafficking.

Present Study

In this study, we introduce the *Trafficking and Human Exploitation Myths Identification Scale* (THEMIS), a tool developed to address the need for a psychometrically robust instrument in this field. Drawing on existing literature and input from expert organizations, we developed an initial pool of 25 items designed to assess common misconceptions about HT. These items were administered to a large sample of adults residing in the United Kingdom, alongside additional measures of trafficking-related knowledge.

We proposed four hypotheses. First (H1), we expected a substantial proportion of participants to endorse each THEMIS item, reflecting the continued prevalence of trafficking-related myths. Second (H2), consistent with previous research (e.g., Cunningham & Cromer, 2016; Houston-Kolnik et al., 2016), we hypothesized that women would demonstrate greater knowledge of HT than men. Third (H3), we predicted that higher THEMIS scores – indicating stronger endorsement of trafficking myths – would correlate positively with higher HTMS scores, lower acceptance of a non-prototypical trafficking scenario, and greater victim-blaming. Finally (H4), while we did not specify

the number of latent dimensions, we hypothesized that exploratory factor analysis would reveal a clear factor structure, in line with the criteria outlined by Costello and Osborne (2005), and that this structure would be confirmed in an independent sample using confirmatory factor analysis.

Materials and Methods

Initial Scale Construction

The conceptual domain of the THEMIS concerns the extent to which individuals' shared beliefs about HT deviate from the definitions and characteristics outlined in the United Nations Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children. Item generation followed a combined deductive and inductive approach, as recommended by Boateng et al. (2018). Using the deductive method (Raykov & Marcoulides, 2011), the research team generated an initial pool of candidate items based on a review of the academic literature and a targeted, non-systematic search of myths presented by established anti-slavery organizations and agencies. These included: Anti-Slavery International (n.d.), International Justice Mission (n.d.), International Organization for Migration (n.d.), National Human Trafficking Hotline (n.d.), Save the Children (n.d.), The SAFE Alliance (n.d.), United States Committee for Refugees and Immigrants (n.d.), United Nations Office on Drugs and Crime (n.d.), and Unseen UK (n.d.). We ceased adding sources when thematic redundancy was observed, suggesting saturation had been reached.

In parallel, the inductive approach was informed by individual interviews conducted by members of our research team with representatives of non-governmental organizations possessing extensive experience in anti-slavery efforts (Paramio et al., 2024). These interviews provided further insight into prevalent misconceptions encountered in practice and contributed to the refinement and contextual relevance of the item pool.

The combined deductive and inductive approaches resulted in a pool of 25 candidate items, presented as statements. In line with Kline's (1993) recommendation, this item pool was approximately twice the length of the intended final scale, which was set at 12–13 items to ensure a balance between psychometric reliability, construct coverage, and practical usability. Following DeVellis's (2003) guidelines, the items were refined through expert consultation to ensure content validity, clarity, grammatical accuracy, and overall comprehensibility. Four experts provided detailed feedback on each item. These experts had at least five years of experience offering voluntary professional support (social, psychological, or legal) to victims of human trafficking through non-governmental organizations.

To further assess content relevance and response clarity under realistic conditions, a pilot study was conducted with 40 undergraduate psychology students, selected as a convenience sample. All participants were first-year students who had not yet taken any coursework related to human trafficking and were therefore not expected to have prior familiarity with the topic. Participants completed the scale online and were invited to provide qualitative feedback in the form of free-text comments alongside their responses. While no items were removed as a result of the expert review or pilot testing, minor revisions were made to improve wording and readability ("all prostitution" was replaced with "all commercial sex"; "underdeveloped countries" was replaced with "developing countries"; and "communities which are poor and uneducated" was replaced with "poor uneducated communities"). The final set of items is presented in Table 1.

Scale Refinement and Validation

Participants

Participants were recruited between March 10 and March 12, 2025, from two sources through convenience sampling. The primary sample was obtained through Prolific, a web-based recruitment platform with multiple safeguards to ensure data quality and minimize the presence of bots or



Table 1. Initial Pool of Items, Including Mean (*M*), Standard Deviation (*SD*), Percentage of False and True Responses, and Discrimination Index (*DI*).

	ltem	М	SD	False n (%)	True n (%)	DI
1	A person receiving payment for commercial sex or labor cannot be a victim of traffic	2.00	1.00	398 (94.5%)	23 (5.5%)	.13
2	If the trafficked person consented to their initial situation, it is not HT	2.49	1.43	350 (83.1%)	71 (16.9%)	.08
3	Forced marriage is different from HT	3.72	1.33	174 (41.3%)	247 (58.7%)	.36
4	Forced begging is different from HT	2.99	1.19	309 (73.4%)	112 (26.6%)	.22
5	thm:htm:htm:htm:htm:htm:htm:htm:htm:htm:	3.02	1.37	263	158	.24
6	All HT situations involve commercial enterprises, companies, or businesses	2.88	1.23	(62.5%) 305 (72.4%)	(37.5%) 116 (27.6%)	.33
7	Victims of HT will seek help as soon as they have the opportunity	2.79	1.19	317 (75.3%)	104 (24.7%)	.38
8	All HT situations involve organized crime	3.96	1.24	143 (34.0%)	278 (66.0%)	.33
9	HT only involves females	1.56	0.84	412 (97.9%)	9 (2.1%)	.07
10	Normal-appearing, well-educated, middle-class people are not trafficked	2.38	1.12	371 (88.1%)	50 (11.9%)	.16
11	HT does not include domestic servitude cases	2.41	1.04	382 (90.7%)	39 (9.3%)	.08
12	Traffickers only target people they do not know	2.42	1.10	367 (87.2%)	54 (12.8%)	.31
13	The situation of child soldiers cannot be described as HT	2.65	1.16	338 (80.3%)	83 (19.7%)	.40
14	People are never trafficked in their own country	1.85	0.99	398	23 (5.5%)	.19
15	HT always involves sex or prostitution	2.87	1.33	(94.5%) 295	126	.51
16	HT involves only children	1.43	0.86	(70.1%) 410	(29.9%) 11 (2.6%)	.07
17	HT only happens in illegal or underground industries	2.74	1.36	(97.4%) 315	106	.36
18	All commercial sex is HT	2.55	1.17	(74.8%)	(25.2%) 68 (16.2%)	.11
19	HT always involves the movement or transportation of people across borders	3.30	1.37	(83.8%) 238	183	.57
20	HT always involves physical force, kidnapping, or restraining	3.27	1.30	(56.5%) 246	(43.5%) 175	.46
21	HT only happens in poor uneducated communities	2.16	1.20	(58.4%) 361	(41.6%) 60 (14.3%)	.40
22	Debt bondage is different from HT	3.51	1.02	(85.7%) 201	220	.24
23	HT does not happen in this country	1.87	1.16	(47.7%) 396	(52.3%) 25 (5.9%)	.14
24	All HT victims are undocumented migrants	2.34	1.25	(94.1%) 353	68 (16.2%)	.42
25	HT only happens in developing countries	1.84	0.99	(83.8%) 398 (94.5%)	23 (5.5%)	.18

All items min 1 max 6.

malicious respondents. Prolific has been demonstrated to be a reliable tool for remote behavioral research (Palan & Schitter, 2018). Of the 557 individuals who initially participated, six were excluded-two for sharing the same IP address, one for failing an attention check, and three for incomplete responses – resulting in a final sample of 551 participants. A secondary sample was collected via an online survey distributed through QuestionPro. Of the 89 individuals who participated, 11 were excluded due to excessive missing data, yielding a final sample of 78 participants.

Exploratory factor analysis (EFA) was conducted using a subsample comprising about three fourths of Prolific participants (n = 421, 76.4%). The remaining Prolific participants (n = 130), along with all participants recruited via QuestionPro (n = 78), were reserved for confirmatory factor analysis (CFA). For the EFA subsample, the median age was 39 years (interquartile range = 22). In terms of gender distribution, 210 participants (49.9%) identified as female, 208 (49.4%) as male, two as "other," and one preferred not to disclose their gender. A coding error prevented the collection of gender and age data from the QuestionPro participants (aside from confirmation that all were 18 years of age or older). Ethnicity, profession, and education were also not collected.

All participants in both groups reported residing in the United Kingdom (UK) – the Prolific sample included participants from 164 areas across all UK regions and countries, with the distribution approximating regional distribution, as all deviations were below 6.06%, and the average deviation across regions was 2.69%. In this sample, males were slightly overrepresented (+0.7%) and females were slightly underrepresented (-1.5%) compared to the national UK population proportions; also, this sample closely matched the UK population across age groups, with only small deviations, notably a higher proportion of younger participants and a lower representation of those aged 70 and above.

Both subsample sizes exceeded commonly accepted guidelines for factor analysis, which recommend a minimum of 200 participants (Comrey, 1973). Given that the initial item pool consisted of 25 items and the final scale retained 12 items (see below), the participant-to-item ratio in each subsample was approximately 17:1—well above the recommended 10:1 ratio for robust factor analysis (Gorsuch, 1983).

Materials

The 25-item scale developed in the previous stage employed a 6-point Likert-type response format, capturing the full continuum of agreement with each statement, ranging from 1 (*definitely false*) to 6 (*definitely true*). To enhance data quality and reduce acquiescence bias, several items were reverse-coded (DeVellis & Thorpe, 2021). Additionally, item order was randomized for each participant to minimize response bias (Jackson & Greene, 2016). To assess convergent validity during the EFA phase, participants also completed one related scale and responded to a vignette-based scenario.

Human Trafficking Myths Scale (HTMS; Cunningham & Cromer, 2016). The HTMS consists of 17 items—15 addressing general myths about HT and two specifically focused on sex trafficking – rated on a 6-point Likert scale from 1 (definitely false) to 6 (definitely true). An example item is: "People from other countries who are trafficked in the United States are always illegal immigrants." In the original validation study with 409 university students, the scale demonstrated good internal consistency ($\alpha = .81$). In the present study, internal reliability was similarly strong ($\alpha = .88$; $\omega = .88$).

Vignette. The written vignette (see Appendix 1) was created by our team, drawing inspiration from Muhammad's (2020) TED talk. It describes a fictitious labor trafficking case that intentionally challenges several of the 25 myths identified in the first questionnaire of this study. The vignette was presented to participants after they had completed the 25-item scale as well as the HTMS. After reading the vignette, participants responded to two questions, originally used by Cunningham and Cromer (2016), rated on a 6-point Likert scale from 1 (definitely false) to 6 (definitely true): "This situation is believable" and "Jack is responsible for the situation."

Procedure

Ethical approval for the study was obtained from the ethics board of the first author's university prior to data collection (reference 24/PSY/034). Participants completed an online survey in English, which included an information sheet, consent form, and questions regarding biographic data (age, gender) before proceeding with the survey. Data analysis was conducted using IBM SPSS Statistics and Amos v.29.0.

Results

Descriptive Statistics

Table 1 presents the mean and standard deviation for each item. Ceiling and floor effects were observed in 17 of the 25 items, with more than 15% of the sample scoring at the minimum value of the scale (Klapproth et al., 2023). When responses were dichotomized into "false/true" categories (grouping "definitely," "mostly," and "probably true" or false into single yes/no responses), only nine participants (2.1%) did not endorse any HT myths. In contrast, 109 participants (25.9%) endorsed one to three myths, 158 participants (37.6%) endorsed four to six, 82 (19.5%) endorsed seven to nine, 44 (10.5%) endorsed 10 to 12, 12 (2.9%) endorsed 13 to 15, and seven participants (1.7%) endorsed 15 to 18 myths. The most frequently endorsed myths were: "All HT situations involve organized crime" (66%) and "Forced marriage is different from HT" (58.7%). The least endorsed myths were: "HT only involves females" (2.1%) and "HT only involves children" (2.6%) - see Table 1. The item discrimination index (DI) was calculated by comparing the dichotomized responses of the top 27% of participants (with the highest scores) to those in the bottom 27% (Wiersma & Jurs, 1990). As shown in Table 1, the DI for nine of the items fell below the .19 threshold recommended for rejection (Ebel, 1972), and these items were subsequently excluded from the provisional scale.

Males and females only differed in their non-dichotomized responses to items 2 (U = 19234, p = .029, r = .11) and 18 (U = 18540.5, p = .005, r = .14). Age showed a positive correlation with endorsement of the following items: 1 (rs = .11, p = .028), 10 (rs = .28, p < .001), 12 (rs = .18, p = .011), 14 (rs = .26, p < .001), 16 (rs = .10, p = .035), 17 (rs = .10, p = .033), 21 (rs = .12, p = .011), 24 (rs = .17, p < .001), and 25 (rs = .13, p < .001), andp = .010). Conversely, there was a negative correlation between age and endorsement of items 7 (rs = -.12, p = .012), 11 (rs = -.19, p < .001), and 22 (rs = -.12, p = .018).

Exploratory Factor Analysis

EFA was conducted on the remaining 16 items to identify underlying factors and refine the scale structure. The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was .81, which is generally considered a "good" indication that latent factors are likely present and that EFA is appropriate (Howard, 2016). Additionally, Bartlett's test of sphericity (p < .001) confirmed the factorability of the correlation matrix (Tabachnick & Fidell, 2001). Common-factor analysis (FA) with principal-axis factoring was chosen, as it is more suited to identifying latent factors that account for shared variance among items, which aligns with the goals of developing new scales, as opposed to principalcomponent analysis (Worthington & Whittaker, 2006). We applied promax rotation, anticipating that the factors would be correlated. No pairs of items had correlations exceeding .80, and all individual measures of sampling adequacy were above the .70 threshold.

Successive iterations of EFA were conducted by removing items with communalities below 0.20 (Child, 2006), loadings of .32 or higher on two or more factors (Tabachnick & Fidell, 2001), or loadings below 0.30 on any factor (Costello & Osborne, 2005). Five factors with eigenvalues greater than one were identified as candidates for retention. To refine the factor structure, multiple factor solutions were tested by varying the number of factors extracted (e.g., two, three, or four) based on criteria such as eigenvalues greater than one and the scree plot. The stability of the factor loadings across these different configurations was examined to avoid solutions where any factor had fewer than three items (Costello & Osborne, 2005). Ultimately, the final three-factor solution, which accounted for 38.1% of the total variance (F1: 24.3%, F2: 7.7%, F3: 6.2%), was retained. It is important to note that the percentage of variance explained by the first factor did not meet the 40% threshold for supporting one-dimensionality as suggested by Carmines and Zeller (1979).

The factor loadings are displayed in Table 2. Factor 3 (F3) included three items related to less well-known forms of HT, such as forced marriage, debt bondage, and child soldiers. Labeling the other two factors is more challenging, but most of the five items in Factor 1 (F1) addressed who can be a victim or where trafficking can occur, while the four items in Factor 2 (F2) primarily

Analysis of the THEMIS.								
Item	F1	F2	F3					
Q14	.76							
Q21	.74							
Q24	.57							
Q12	.55							
Q17	.53							
Q20		.82						
Q15		.62						
Q6		.46						
Q19		.45						
Q3			.74					
Q22			.45					
Q13			.32					

Table 2. Item Loadings from the Exploratory Factor

concerned the methods traffickers use. All three factors demonstrated significantly positive correlations with each other (F1-F2: $r_s = .38$, p < .001; F2-F3: $r_s = .16$, p = .001; F1-F3: $r_s = .22$, p < .001).

Internal Consistency

Internal consistency was assessed using McDonald's omega coefficient, which is a more flexible and general measure of reliability compared to Cronbach's alpha, especially for multidimensional scales with unequal factor loadings (Watkins, 2017). The omega value for the total scale was .75. This value increased slightly to .76 when items referring to forced marriage and debt bondage were deleted. However, both items were retained, as the increase was minimal and they contributed to a three-item factor. Omega values for the three factors or subscales were .77, .70, and .53, respectively; for reference, please note that alpha values were .76 for the scale, and .77, .69, and .51 for the three factors. Although there are no universally accepted benchmarks for interpreting omega, Reise et al. (2013) suggest that a value greater than .50 is acceptable, with values closer to .75 being preferred. Additionally, the mean inter-item correlation coefficients for the total scale ($r_s = .21$) and each factor ($r_s = .44$ for F1, $r_s = .34$ for F2, $r_s = .26$ for F3) fell within the .15 to .50 range recommended by Clark and Watson (1995). Item - total correlations were examined to ensure that only parsimonious, functional, and internally consistent items were retained (Raykov & Marcoulides, 2011). All corrected item - total correlations for F1 and F2 exceeded the .30 threshold commonly used for potential item deletion (Boateng et al., 2018), while two items in F3 had values below .30.

Multidimensionality alone does not guarantee that subscales provide meaningful, reliable information about distinct subdomains that differ from the general construct (Reise et al., 2013). In fact, the aggregate total test score might be a better predictor of an individual's true score on a subscale than the observed subscale score itself. To assess the appropriateness of reporting subscale scores, we followed Haberman's (2008) procedure, calculating the proportional reduction in mean squared error based on total scores (PRMSE_{TOT} = .42, .32, and .26 for F1, F2, and F3, respectively) and comparing these with the proportional reduction in mean squared error based on subscale scores (PRMSE_S = .77, .70, and .55 for F1, F2, and F3, respectively). The higher PRMSE_S values for each factor compared to PRMSE_{TOT} suggest that subscale scores provide a more accurate estimate of an individual's true score on each subscale (Reise et al., 2013).

Convergent Validity

The total score on the THEMIS demonstrated strong, statistically significant correlations with the HTMS (rs = .67), the vignette credibility question (rs = -.28), and the vignette responsibility question (rs = .31), all with *p*-values < .001.



Confirmatory Factor Analysis

The three-correlated-factor model was evaluated using confirmatory factor analysis with maximum likelihood estimation. Model fit was assessed using absolute fit indices (normed Chi-square $[\chi^2/df]$, Standardized Root Mean Square Residual [SRMR]), parsimony-adjusted indices (Root Mean Square Error of Approximation [RMSEA]), and incremental fit indices (Tucker-Lewis Index [TLI] and Bentler Comparative Fit Index [CFI]). Good model fit was indicated by $\chi^2/df < 2$ (Carmines & McIver, 1981); SRMR < .08, RMSEA ≤ .06, and TLI and CFI > .95 (Hu & Bentler, 1999). All fit indices in our CFA met these criteria: $\chi^2/df = 1.38$, SRMR = .04, RMSEA = .04 [CL₉₀ .01 to .07], TLI = .98, and CFI = .98.

Discussion

Despite the ubiquity and impact of human trafficking, no scale with appropriately reported psychometric properties has, to date, been available to measure erroneous beliefs about the phenomenon. The present study aimed to address this gap through the development and preliminary validation of the THEMIS. Unlike previous attempts, the THEMIS is grounded in a review of myths identified by individuals and organizations with exceptional expertise in the field. Their involvement was crucial in the proposal and refinement of the initial 25 items, ensuring content validity - the extent to which a measure adequately captures the domain of interest (Hinkin, 1995).

Our Hypothesis 1 posited that a substantial portion of our sample would endorse each of the 25 items. This was only partly true, as seven items - particularly those restricting HT to certain countries or to women and children - were endorsed by fewer than one in ten respondents. This may reflect the impact of recent awareness campaigns, such as the #EndItMovement (End It Movement, n.d.) in 2012, Hidden in Plain Sight (Polaris, n.d.) in 2016 in the United States, or Look Closer (The Children's Society, n.d.) in 2017 in the United Kingdom, to name a few.

Contrary to our Hypothesis 2, females in the sample did not exhibit lower endorsement of HT myths compared to males. However, our point of reference was studies in which sex trafficking featured prominently – and given that females constitute the overwhelming majority of victims in that domain (Allan et al., 2023), gender differences in interest and knowledge may be more pronounced in contexts where sex trafficking is the focus than in other domains of HT where the distribution across genders is more balanced.

Convergent validity was assessed by comparing THEMIS scores with existing measures related to beliefs about HT. Supporting our Hypothesis 3, participants with higher scores on the THEMIS also demonstrated higher scores on the HTMS. Notably, individuals with stronger endorsement of HT myths were more likely to perceive the atypical vignette as lacking credibility as a case of HT and to attribute at least partial responsibility to the victim - replicating Cunningham and Cromer's (2016) findings.

Hypothesis 4, which suggested a clean factor structure would emerge through EFA and be validated with CFA, was also supported. Our exploration of construct validity through EFA revealed three potential factors. Factor 1 comprises five items related to contexts in which individuals may become victims (e.g., own country, uneducated communities, undocumented migrants, people unknown to traffickers). The fifth item, "illegal industries," is more open to interpretation. Factor 2 includes four items relating to elements in the UN definition of HT: act (transportation across borders), means (physical force), and purpose (sex or prostitution; commercial enterprises). Finally, Factor 3 contains three items reflecting atypical HT scenarios (e.g., forced marriage, debt bondage, and child soldiers). Statistical analyses demonstrated that each subscale provided more accurate information about its respective subdomain than the total scale. Reliability of the overall scale was appropriate, as measured with McDonald's omega, as was the reliability of Factors 1 and 2. However, the reliability of Factor 3 was low, which challenges its applicability as a stand-alone subscale until further development – even

though the small number of items in this factor is known to affect reliability statistics (Cortina, 1993). Confirmatory factor analysis supported the three-factor model with correlated factors.

In balancing statistical rigor with theoretical and practical relevance, we carefully considered whether items that did not meet psychometric inclusion criteria should be entirely excluded from future research. For example, the item "Forced begging is different from human trafficking" did not meet the statistical thresholds for inclusion – such as low communalities or cross-loadings – yet was endorsed as true by nearly 25% of respondents and has been recognized by several anti-trafficking organizations as a prevalent myth. Excluding such items solely on statistical grounds risks overlooking content that may be highly relevant in applied settings, particularly for public education and awareness campaigns. Therefore, we propose a two-tiered structure for the THEMIS scale. The first tier comprises 12 items that meet robust psychometric standards and together provide a quantitative measure of belief in human trafficking myths. The second tier includes an additional set of items that, while not contributing to the overall score, may still offer valuable qualitative or exploratory insights and can be used optionally in contexts where capturing a broader range of misconceptions is desirable. The final version of the tool, including reversed items, is provided in Appendix 2.

Limitations and Directions for Future Research

Although our sample approximated the regional and age distribution of the general adult population in the United Kingdom, it represents a snapshot of beliefs that may be influenced by social and legal changes over time. Indeed, it might be expected that younger and older respondents would exhibit differing levels of social sensitivity or political views on the issue, although the few significant agerelated differences we observed do not provide a clear pattern. Future studies should explore the development and evolution of misconceptions about HT to gain a deeper understanding of the factors involved. Similarly, due to practical considerations, our study did not collect data on the participants' ethnicity, profession or education. Given the relevance of myths about human trafficking in certain fields, studies focused on specific populations such as healthcare, law enforcement, or social services professionals – as well as people from different ethnic backgrounds – could provide valuable insights.

The language of the THEMIS items was considered clear and understandable by the experts consulted and the participants in the pilot study. However, their personal experiences and academic backgrounds may have enabled them to better understand terms that might not be as clear to a portion of the general population. Additionally, the use of categorical expressions like "all" or "only" may encourage cautious responses, despite the broad range of answer options available.

In the introduction, we referenced the legal language used in different jurisdictions, which may have influenced participants' responses. Different results might have emerged had our items used the term modern slavery instead of human trafficking, as the laws in the jurisdiction where our participants reside specifically link the latter term to the movement of people. This issue warrants further exploration, and any application of the THEMIS outside of England and Wales should consider whether adapting the terminology (beyond simple linguistic translation) is necessary.

We would like to highlight the limited availability of instruments with which to compare the results of the THEMIS. As mentioned in the introduction, the HTMS presents significant methodological issues that limit its applicability, while the STAS focuses on a specific aspect of HT - in fact, four of the five items in the knowledge subscale include the term "sex industry." The use of a vignette allowed us to provide additional evidence of validity, but future studies could employ alternative approaches, including qualitative data collection. Also, the pattern of ceiling and floor effects suggests the scale may be less sensitive in groups with higher baseline knowledge, and future revisions could look at revising these items or using item response theory to improve discrimination.

We believe it is particularly interesting to explore the parallels between HT myths and studies on the effects of rape myths (e.g., Li et al., 2025), child sexual abuse myths (e.g., Capaldi et al., 2024), and prostitution myths (e.g., Strathdee et al., 2015). For instance, White et al. (2024) demonstrated a negative relationship between the endorsement of rape myths and perceptions of social movements advocating for female survivors of sexual assault, while Denne et al. (2023) provided evidence that adherence to child sexual abuse myths can influence the outcome of criminal cases. In this context, results from Aosved and Long (2006) are noteworthy, as they demonstrated the existence of interrelations between various "oppressive belief systems" (p. 481), such as rape myth acceptance, sexism, racism, homophobia, classism, ageism, and religious intolerance.

The THEMIS scale was developed based on the UN definition of human trafficking, which encompasses various forms of exploitation, including both sex and labor trafficking. Measuring knowledge and beliefs about these forms within a single instrument is justified by the fact that many widely held myths - such as those concerning movement, coercion, or victim characteristics - are common to multiple types of trafficking and reflect general misconceptions about the phenomenon as a whole. A unified approach also aligns with the way public discourse and awareness campaigns typically address trafficking, and helps identify overarching knowledge gaps. At the same time, we acknowledge that sex and labor trafficking often involve distinct dynamics, offenders, and social narratives (Efrat, 2015), and that measuring them separately may be necessary in certain contexts - particularly when examining specific stereotypes, informing targeted interventions, or evaluating specialized training programs.

The availability of psychometrically robust measurement tools is crucial for the credibility of research and for garnering support for initiatives aimed at addressing key issues. In this context, THEMIS provides a solid foundation for both future research and practical interventions. A priority, initially, is to assess the presence of trafficking myths among professionals most likely to interact with victims – such as law enforcement, healthcare personnel, and social workers - and to examine how these beliefs may affect victim identification and support. However, the assessment of trafficking myths should also extend to the general population, which plays a critical role in shaping public discourse, supporting evidence-based policies, and contributing to the early identification of victims. A public understanding grounded in evidence, rather than driven by sensationalism or vested interests, may contribute to a public health approach that goes beyond interventions designed to alter the behaviors and outcomes of at-risk individuals, shifting attention toward broader structural drivers such as financial hardship, limited access to economic opportunity, unequal gender dynamics, marginalization, and exploitative market pressures (Such et al., 2020). THEMIS can help establish baseline data, guide the development of targeted professional training and public education campaigns, and evaluate their effectiveness. Furthermore, future studies can explore the relationship between HT myths and the oppressive belief systems identified by Aosved and Long (2006) and others - and how these systems may be shaped by modern forms of communication, such as social media (Thulin et al., 2024). Understanding these aspects is crucial for informing awareness campaigns and interventions aimed at facilitating the identification of human trafficking and providing better support to victims.

Acknowledgments

The authors wish to express their gratitude for the crucial support of Asociación Algeciras Acoge, particularly during the qualitative phase of this project, as well as to Adarsh Makdani, Senior Technician at the LJMU School of Psychology, for his invaluable guidance in using Prolific.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.



ORCID

Ricardo Tejeiro http://orcid.org/0000-0003-1181-7123

References

Allan, C., Winters, G. M., & Jeglic, E. L. (2023). Current trends in sex trafficking research. Current Psychiatry Reports, 25 (5), 175–182. https://doi.org/10.1007/s11920-023-01419-7

Anti-Slavery International. (n.d.). *Home*. https://www.antislavery.org/

Aosved, A. C., & Long, P. J. (2006). Co-occurrence of rape myth acceptance, sexism, racism, homophobia, ageism, classism, and religious intolerance. Sex Roles, 55(7-8), 481-492. https://doi.org/10.1007/s11199-006-9101-4

Atauz, S., Akba, E., & Atasu-Topcuo Iu, R. (2009). Human trafficking in Turkey: Findings from northeastern Anatolia. Asian and Pacific Migration Journal, 18(3), 419-440. https://doi.org/10.1177/011719680901800305

Babu, J., Boland, G. M., & Salami, T. (2024). Accurate identification and prosocial behaviors towards human trafficking victims among psychology students. Journal of Human Trafficking, 10(3), 430-444. https://doi.org/10.1080/23322705. 2022.2040075

Bales, K. (2011). The slave next door: Human trafficking and slavery in America today. University of California Press. Beck, M. E., Lineer, M. M., Melzer Lange, M., Simpson, P., Nugent, M., & Rabbitt, A. (2015). Medical providers' understanding of sex trafficking and their experience with at-risk patients. Pediatrics, 135(4), e895-902. https://doi. org/10.1542/peds.2014-2814

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. Frontiers in Public Health, 6, 149. https://doi.org/10.3389/fpubh.2018.00149

Bonilla, T., & Mo, C. H. (2018). The evolution of human trafficking messaging in the United States and its effect on public opinion. Journal of Public Policy, 39(2), 201-234. https://doi.org/10.1017/S0143814X18000107

Brennan, D. (2017). Fighting human trafficking today: Moral panics, zombie data, and the seduction of rescue. Wake Forest Law Review, 52(2), 477-496.

Cambridge Dictionary. (n.d.). Misconception. Cambridge University Press. https://dictionary.cambridge.org/dictionary/ english/misconception

Capaldi, M., Schatz, J., & Kavenagh, M. (2024). Child sexual abuse/exploitation and LGBTQI+ children: Context, links, vulnerabilities, gaps, challenges and priorities. Child Protection and Practice, 1, 100001. https://doi.org/10.1016/j. chipro.2024.100001

Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables: Analysis of covariance structures. In G. W. Bohrnstedt & E. F. Borgatta (Eds.), Social measurement: Current issues (pp. 65-115). Sage Publications, Inc. Carmines, E. G., & Zeller, R. A. (1979). Reliability and validity assessment. Sage.

Child, D. (2006). The essentials of factor analysis (3rd ed.). Continuum.

The Children's Society. (n.d.). Home. https://www.childrenssociety.org.uk/

Childress, C., Farrell, A., Wagner, A., Bhimani, S., & Maass, K. L. (2024). The half-built road: Exploring the impediments to justice for victims of labor trafficking. Journal of Human Trafficking, 10(2), 271-288. https://doi.org/10.1080/ 23322705.2024.2303252

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. Psychological Assessment, 7(3), 309–319. https://doi.org/10.1037/1040-3590.7.3.309

Clawson, H., Dutch, N., Solomon, A., & Grace, L. G. (2009). Human trafficking into and within the United States: A review of the literature. U.S. Department of Health and Human Services. https://aspe.hhs.gov/reports/humantrafficking-within-united-states-review-literature-0

Cockbain, E., & Tompson, L. (2024). The role of helplines in the anti-trafficking space: Examining contacts to a major 'modern slavery' hotline. Crime, Law, & Social Change, 82(2), 463–492. https://doi.org/10.1007/s10611-024-10151-z Comrey, A. L. (1973). A first course in factor analysis. Academic Press.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theoretical and practical issues. Journal of Applied Psychology, 78(1), 98–104. https://doi.org/10.1037/0021-9010.78.1.98

Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. Practical Assessment, Research & Evaluation, 10, 1-9. https://doi.org/10.7275/jyj1-4868

Cunningham, K. C., & Cromer, L. D. (2016). Attitudes about human trafficking: Individual differences related to belief and victim blame. Journal of Interpersonal Violence, 31(2), 228-244. https://doi.org/10.1177/0886260514555369

Denne, E., George, S. S., & Stolzenberg, S. N. (2023). Developmental considerations in how defense attorneys employ child sexual abuse and rape myths when questioning alleged victims of child sexual abuse. Journal of Interpersonal Violence, 38(23-24), 11914-11934. https://doi.org/10.1177/08862605231189512

DeVellis, R. F. (2003). Scale development: Theory and applications (2nd ed.). Sage.

DeVellis, R. F., & Thorpe, C. T. (2021). Scale development: Theory and applications. Sage Publications.

Ebel, R. (1972). Essentials of educational measurement. Prentice Hall.



Efrat, A. (2015). Global efforts against human trafficking: The misguided conflation of sex, labor, and organ trafficking. International Studies Perspectives, 17(1), 34-54. https://doi.org/10.1111/insp.12097

End It Movement. (n.d.). Home. https://enditmovement.com/

Exeni McAmis, N. E., Mirabella, A. C., McCarthy, E. M., Cama, C. A., Fogarasi, M. C., Thomas, L. A., Feinn, R. S., & Rivera-Godreau, I. (2022). Assessing healthcare provider knowledge of human trafficking. PLOS ONE, 17(3), e0264338. https://doi.org/10.1371/journal.pone.0264338

Farrell, A., & Pfeffer, R. (2014). Policing human trafficking: Cultural blinders and organizational barriers. Annals of the American Academy of Political and Social Science, 653(1), 46-64. https://doi.org/10.1177/0002716213515835

Fernandes, Â., Gonçalves, M., & Matos, M. (2020). Who are the victims, who are the traffickers? University students' portrayals on human trafficking, victims & offenders. Victims & Offenders, 15(2), 243-266. https://doi.org/10.1080/ 15564886.2019.1711276

Gearon, A. (2019). Child trafficking: Young people's experiences of front-line services in England. The British Journal of Criminology, 59(2), 481–500. https://doi.org/10.1093/bjc/azy042

Gonzalez-Pons, K., Gezinski, L., Morzenti, H., Hendrix, E., & Graves, S. (2020). Exploring the relationship between domestic minor sex trafficking myths, victim identification, and service provision. Child Abuse and Neglect, 100, 104093. https://doi.org/10.1016/j.chiabu.2019.104093

Gorsuch, R. L. (1983). Factor analysis (2nd ed.). Lawrence Erlbaum.

Haberman, S. J. (2008). When can subscores have value? Journal of Educational and Behavioral Statistics, 33(2), 204-229. https://doi.org/10.3102/1076998607302636

Hartinger-Saunders, R. M., Trouteaud, A. R., & Johnson, J. M. (2017). Mandated reporters' perceptions of and encounters with domestic minor sex trafficking of adolescent females in the United States. American Journal of Orthopsychiatry, 87(3), 195–205. https://doi.org/10.1037/ort0000151

Hefner, M. K., & Hill, L. B. (2023). Naming, blaming, and claiming: Understanding human trafficking victims' nondisclosure and non-reporting behavior. Journal of Human Trafficking, 1-15. https://doi.org/10.1080/23322705. 2023.2281212

Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. Journal of Management, 21 (5), 967–988. https://doi.org/10.1177/014920639502100509

Houston-Kolnik, J. D., Todd, N. R., & Wilson, M. (2016). Preliminary validation of the sex trafficking attitudes scale. Violence Against Women, 22(10), 1259-1281. https://doi.org/10.1177/1077801215621178

Howard, M. (2016). A review of exploratory factor analysis decisions and overview of current practices: What we are doing and how can we improve? International Journal of Human-Computer Interaction, 32(1), 51-62. https://doi.org/ 10.1080/10447318.2015.1087664

Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6(1), 1-55. https://doi.org/10.1080/10705519909540118

International Justice Mission. (n.d.). Home. https://www.ijm.org/

International Labour Organization. (2022). Global estimates of modern slavery: Forced labour and forced marriage. https://www.ilo.org/publications/major-publications/global-estimates-modern-slavery-forced-labour-and-forcedmarriage

International Organization for Migration. (n.d.). Home. https://www.iom.int/

Jackson, A., & Greene, R. L. (2016). Question order bias in retrospective evaluations of item and associative recognition. Memory, 25(4), 481-486. https://doi.org/10.1080/09658211.2016.1188964

Kara, S. (2009). Sex trafficking: Inside the business of modern slavery. Columbia University Press.

Kenny, M. C., Helpingstine, C., & Borelus, T. (2023). Conspiracy theories of human trafficking: Knowledge and perceptions among a diverse college population. Journal of Human Trafficking, 1-15. https://doi.org/10.1080/ 23322705.2023.2225367

Klapproth, C. P., Fischer, F., & Rose, M. (2023). Scale agreement, ceiling and floor effects, construct validity, and relative efficiency of the PROPr and EQ-5D-3L in low back pain patients. Health and Quality of Life Outcomes, 21(1), 107. https://doi.org/10.1186/s12955-023-02188-w

Kline, P. (1993). A handbook of psychological testing (2nd ed). Routledge.

Li, N., Augustyn, M. B., & Pinchevsky, G. M. (2025). Prior sexual victimization and rape myth acceptance: Direct victimization, vicarious victimization, and gender. Victims & Offenders, 1–27. https://doi.org/10.1080/15564886.2024. 2439942

Litam, S. D. A., Oh, S., & Conrad, M. J. (2023). Human trafficking myths as a mediator in the relationship between ambivalent sexism and sex trafficking attitudes among undergraduate, medical, and public health students. Journal of Human Trafficking, 1–17. https://doi.org/10.1080/23322705.2023.2210043

Loyens, K., & Paraciani, R. (2021). Who is the ("ideal") victim of labor exploitation? Two qualitative vignette studies on labor inspectors' discretion. The Sociological Quarterly, 64(1), 27-45. https://doi.org/10.1080/00380253.2021.1974321

Mobasher, Z., Baldwin, S. B., Navarro, B., Bressler-Montgomery, D., King, J., Family, L., Smith, L. V., & Kuo, T. (2022). Knowledge and perceptions of human trafficking among community-based and faith-based organization members in South Los Angeles. Global Health Promotion, 29(3), 45–56. https://doi.org/10.1177/17579759211028177

Morel, P. (Director). (2008). Taken [Film]. EuropaCorp.



Muhammad, E. (2020, March 14). My experience as a labor trafficking survivor [Video]. TEDxDayton. https://www.ted. com/talks/elijah_muhammed_my_experience_as_a_labor_trafficking_survivor

National Human Trafficking Hotline. (n.d.). Home. https://humantraffickinghotline.org/en

Palan, S., & Schitter, C. (2018). Prolific.ac-a subject pool for online experiments. Journal of Behavioral and Experimental Finance, 17, 22-27. https://doi.org/10.1016/j.jbef.2017.12.004

Paramio, A., Tejeiro, R., & Albiol-Townsend, S. (2024, October). Public perceptions on human trafficking: A preliminary analysis of NGO perspectives [Paper presentation]. II International Congress on Sustainable Social Development (ICOSSOD24), Jerez, Spain.

Polaris. (n.d.). Home. https://polarisproject.org/

Raykov, T., & Marcoulides, G. A. (2011). Introduction to psychometric theory. Routledge.

Reise, S. P., Bonifay, W. E., & Haviland, M. G. (2013). Scoring and modeling psychological measures in the presence of multidimensionality. Journal of Personality Assessment, 95(2), 129-140. https://doi.org/10.1080/00223891.2012. 725437

The SAFE Alliance. (n.d.). *Home*. https://www.safeaustin.org/

Salami, T., Babu, J., & Hari, C. (2022). Criminal justice students' perceptions of human trafficking victims: Assessing bias and helping behavior. Prairie View A & amp;M University. https://digitalcommons.pvamu.edu/psychologyfacpubs/23

Sanford, R., Martínez, D., & Weitzer, R. (2016). Framing human trafficking: A content analysis of recent U.S. newspaper articles. Journal of Human Trafficking, 2(2), 139-155. https://doi.org/10.1080/23322705.2015.1107341

Save the Children. (n.d.). Home. https://www.savethechildren.org.uk/

Schlegel, A. E. (2015). Human trafficking: Promoting knowledge and dispelling myths [Unpublished master's thesis]. Stephen F. Austin State University.

Sharapov, K., Hoff, S., & Gerasimov, B. (2019). Editorial: Knowledge is power, ignorance is bliss: Public perceptions and responses to human trafficking. Anti-Trafficking Review, 3(13), 1-11. https://doi.org/10.14197/atr.201219131

Simmons, J. V., Lee, T., Simmons, M., & López, I. A. (2014). Nurses' knowledge and attitudes towards victims of sexual trafficking. Florida Public Health Review, 11, 68-72. https://digitalcommons.unf.edu/fphr/vol11/iss1/10

Snajdr, E. (2013). Beneath the master narrative: Human trafficking, myths of sexual slavery and ethnographic realities. Dialectical Anthropology, 37(2), 229-256. https://doi.org/10.1007/s10624-013-9292-3

Strathdee, S. A., Crago, A.-L., Butler, J., Bekker, L.-G., & Beyrer, C. (2015). Dispelling myths about sex workers and HIV. Lancet, 385(9962), 4-7. https://doi.org/10.1016/S0140-6736(14)60980-6

Such, E., Laurent, C., Jaipaul, R., & Salway, S. (2020). Modern slavery and public health: A rapid evidence assessment and an emergent public health approach. Public Health, 180, 168-179. https://doi.org/10.1016/j.puhe.2019.10.018

Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics (4th ed.). Harper & Row.

Tanielian, A., & Tanielian, S. (2019). A cross-cultural comparison of perceptions regarding human trafficking. Journal of Southeast Asian Human Rights, 3(1), 155-184. https://doi.org/10.19184/jseahr.v3i1.9544

Thomas, T. A. (2018). Examining factors that influence reactions to human trafficking [Unpublished master's thesis]. Washington State University. https://scholarworks.sfasu.edu/cgi/viewcontent.cgi?article=1162&context=etds#:~: text=The%20literature%20review%20that%20follows,blame%2C%20and%20willingness%20to%20help

Thulin, E. J., Florimbio, A. R., Philyaw-Kotov, M. L., Walton, M. A., & Bonar, E. E. (2024). Measuring electronically shared rape myths: Scale creation and correlates. Journal of Interpersonal Violence, 39(1-2), 369-392. https://doi.org/ 10.1177/08862605231197140

United Nations Office on Drugs and Crime. (n.d.). Home. https://www.unodc.org/

Unseen UK. (n.d.). Home. https://www.unseenuk.org/

U.S. Committee for Refugees and Immigrants. (n.d.). Home. https://refugees.org/

Van Order, S. M. (2022). Myths, misconceptions, and misrepresentations: An examination of erroneous human trafficking beliefs [Unpublished master's thesis]. Georgia Southern University. https://digitalcommons.georgiasouthern.edu/cgi/ viewcontent.cgi?article=1856&context=honors-theses

Villacampa, C., & Torres, N. (2017). Human trafficking for criminal exploitation: The failure to identify victims. European Journal on Criminal Policy and Research, 23(3), 393-408. https://doi.org/10.1007/s10610-017-9343-4

Watkins, M. W. (2017). The reliability of multidimensional neuropsychological measures: From alpha to omega. The Clinical Neuropsychologist, 31(6-7), 1113-1126. https://doi.org/10.1080/13854046.2017.1317364

White, C., Monteiro, A., & Ferra, F. (2024). An exploration of the rape myths effect on the #MeToo movement acceptance in the UK. Psychiatry, Psychology and Law, 1-12. https://doi.org/10.1080/13218719.2024.2346730

Wiersma, W., & Jurs, S. G. (1990). Educational measurement and testing. Allyn and Bacon.

Wong, J. C., Hong, J., Leung, P., Yin, P., & Stewart, D. E. (2011). Human trafficking: An evaluation of Canadian medical students' awareness and attitudes. Education for Health, 24(1), 501-510. https://doi.org/10.4103/1357-6283.101457

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. Counseling Psychologist, 34(6), 806-838. https://doi.org/10.1177/0011000006288127



Appendix 1. Vignette Used in The Study

Jack, a 10-year-old boy from England, was forced by his parents to work in a warehouse about 40 miles from his home, run by a self-proclaimed religious organization they fervently supported. Framed as a service to the faith, this arrangement required Jack to leave home and live in the warehouse alongside other children, all of whom endured similar conditions. Jack's days were consumed by 16-hour shifts packaging goods and preparing shipments under unsafe and unhygienic conditions. Meals were sparse and of poor quality, and the living quarters—cramped and cold—offered little privacy or respite. There were no opportunities for education or recreation, and medical care was unavailable despite frequent injuries and illnesses among the children. For seven years, Jack remained in this environment. He did not attempt to escape, even though there were no physical restrictions on his movements. During the final two years, he was paid £20 a week to act as a supervisor for the other children. Jack's work at the warehouse ended when an investigation by HM Revenue and Customs (HMRC) uncovered the organization's activities, leading to the dismantling of its operations.

Appendix 2. Trafficking and Human Exploitation Myths Identification Scale (THEMIS)

Part 1

- (1) People are never trafficked in their own country (F1)
- (2) Human trafficking always involves physical force, kidnapping, or restraining (F2)
- (3) Human trafficking only happens in poor uneducated communities (F1)
- (4) Forced marriage is different from human trafficking (F3)
- (5) Human trafficking does not always involve sex or prostitution * (F2)
- (6) All human trafficking victims are undocumented migrants (F1)
- (7) Some human trafficking situations do not involve commercial enterprises, companies, or businesses * (F2)
- (8) Debt bondage is a form of human trafficking * (F3)
- (9) Traffickers only target people they do not know (F1)
- (10) Human trafficking always involves the movement or transportation of people across borders (F2)
- (11) The situation of child soldiers cannot be described as human trafficking (F3)
- (12) Human trafficking only happens in illegal or underground industries (F1)

Part 2

- (1) Victims of human trafficking will seek help as soon as they have the opportunity
- (2) All human trafficking situations involve organized crime
- (3) Normal-appearing, well-educated, middle-class people are not trafficked
- (4) A person receiving payment for commercial sex or labor cannot be a victim of traffic
- (5) If the trafficked person consented to their initial situation, it is not human trafficking
- (6) Forced begging is different from human trafficking
- (7) Human trafficking is another term for smuggling or paying someone to cross the border illegally
- (8) Human trafficking only involves females
- (9) Human trafficking does not include domestic servitude cases
- (10) Human trafficking involves only children
- (11) All commercial sex is human trafficking
- (12) Human trafficking does not happen in this country
- (13) Human trafficking only happens in developing countries

NOTES:

(*) reversed items

F1: factor 1; F2: factor 2; F3: factor 3

Scoring: 1 = definitely false; 2 = mostly false; 3 = probably false; 4 = probably true; 5 = mostly true; 6 = definitely

Total score in THEMIS is the sum of scores in the 12 Part 1 items.

Greater total score reflects greater acceptance of human trafficking myths.