Article

English Validation of a Short Scale Designed to Detect Negative Attitudes towards Trans People (EANT)

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Abstract: (1) Background: Negative attitudes towards sexual minorities are widespread in our society. The Scale of Negative Attitudes towards Transgender people (EANT) has been tested in Spanish-speaking countries in order to assess its applicability as a measure of harmful predispositions towards trans individuals. Understanding these predispositions is important because of transformations in the rights of people in terms of respect for gender diversity. (2) Methods: For the validation of this scale, an online survey was developed and distributed to 362 UK university students aged 18 to 45 years (M = 21.43, SD = 3.42). The sample was randomly divided in half, carrying out the exploratory factor analysis for the first 180 students and performing the confirmatory factor analysis for the remaining 182. (3) Results: The validation of this unifactorial instrument in English was obtained, with a high internal consistency (α = 0.810) that suggests high applicability to measuring this construct, as well as showing expected relationships with typical variables (HATH, TIBS, gender, sexual orientation, religion and education). (4) Conclusions: This study assesses attitudinal tendencies and reveals how sexual prejudice is still implicit in our societies and makes the stigmatisation and discrimination of trans people visible. These findings support the development of strategies to tackle these predispositions.

Keywords: negative attitudes; transgender person; prejudice; gender identity; scale validation; higher education

1. Introduction

Sexuality is fundamental to human identity and experience. It is understood to include sex, gender, sexual orientation, affectivity, social relationships, sexual pleasure and reproduction considered from a personal and sociocultural perspective [1]. Human sexual development is connected to life experiences and is exhibited through attitudes, behaviours, beliefs, roles, fantasies and desires and it is highly influenced by political, economic, cultural and historical factors [2–5]. Gender identity is considered a complex process that contributes to the building of our sexuality in relation to the search for pleasure, security, gender roles and the social norms of a given cultural framework. Gender formation is related to our understanding of the wide diversity of gender identities that exist, including, amongst others trans identities [2–4].

1.1. A Conceptual Framework for Understanding Negative Attitudes towards Transgender Individuals

The term "trans" can be understood in relation to identities, conceptions of life and of corporal expression that reject assumptions of a binary sexual difference as the matrix that determines sexuality scripts [4]. Trans identity is a collective term to refer to those individuals who do not identify with the gender (expression, roles and/or behaviour) assigned to them at birth based on their biological sex, including transgender and gender

non-conforming people [6]. In recent years, movements have emerged that champion the human rights of trans people. Many are explicitly political in nature and are seeking to have legislative demands made by the LGBTIQ+ (Lesbian, Gay, Bisexual, Transgender, Intersexual, Queer and +, which indicates the inclusion of a broader range of identities not represented in this abbreviation) communities reflected in reformed and new laws [4]. For instance, the adoption of the 2030 Agenda for Sustainable Development seeks to ensure that no one is left behind in the face of the growing commitment to public health and the well-being of gender minorities, including trans people, who are identified as comprising between 0.3% and 0.5% (25 million) of the world population [7].

Despite advocacy and some instances of social, legislative and policy change, gender minorities have often seen, and continue to see, their rights violated. Their sexuality has been subject to problematisation and stereotyping because it has been conceptualised in relation to cisgenderism and the heteronormative regime that regulates sexual and affective relationships in our society [8–11]. Cisgenderesim refers to the imposed political and socioeconomic regime that considers cisgender identity (a person who identifies with the gender assigned to them at birth based on their sex) as the only or only legitimate gender. Heteronormativity refers to the regime that considers heterosexuality as the only legitimate sexual orientation [11]. Cisgenderism and heteronormativity are linked such that cisgender identity and heterosexual orientation are widely considered to be of a higher order and value than other identities and orientations. In this sense, any gender and sexual identity that violates this socio-culturally imposed norm is liable to be discriminated against and may be prosecuted or persecuted for being transgressive [11–14]. The LGBTIQ+ community fights against discrimination and prejudice, seeking greater visibility for and respect of their sexual rights and identities [15].

Prejudice can be defined as a negative bias that creates situations of disadvantage with respect to certain social categories. Prejudice has cognitive, affective, behavioural and attitudinal components and these are based on psychological and sociocultural variables. Prejudice must be considered a social problem that can lead to economic, educational and health inequalities and even be used to justify violence and murder [16–18]. Individuals belonging to gender minorities suffer discrimination, such as sexist violence, marriage bars and child adoption bans. These inequalities are interconnected with harmful stereotypes that are intentionally maintained and shared within societies [19]. This manifestation of hostility borne of traditional prejudice may be adapted to socio-political and historical contexts and lead to unfairly destructive behaviours towards members of minority groups [20]. Some of the most socially harmful sexual prejudices currently are sexism, homophobia and transphobia. There are large positive and significant correlations between these sexual prejudices [21]. Considering the fundamental ideas on which prejudices are based, it can be argued that discrimination against trans people is rooted in the justification and maintenance of cisnormative and heteronormative privileges over sexual minorities [11]. Thus, transphobia can be understood as the discomfort with or negative attitudes and/or behaviours towards transgender identity [14,22].

Because trans people break with the traditional conception of the dominant binary gender conception (cisgenderism) they are systematically and unfairly exposed to exclusions, repressions and other practices of personal, institutional and social harassment [11–13]. The maintenance of these discriminatory actions has been fuelled by medical and legal pathologisation that has stigmatised and sanctioned this identity [6]. This lack of respect for the diversity of gender identities continues to be visible in society, leading to feelings of oppression and vulnerability in this group, threatening their human rights and making it hard for them to freely and healthily enjoy their sexuality [23]. Because of transphobia, trans identities have, at best, been considered somehow incomplete and, at worst, identified as pathological conditions [24]. The World Health Organization (WHO) did not redefine until 2018, in the 11th edition of the International Statistical Classification of Diseases and Related Health Problems (ICD-11) "transsexualism" and "gender identity disorder in children" as incongruities of gender in childhood, adolescence and adulthood, clearly

stating that they are not mental illnesses. This redefinition aims to focus on guaranteeing sexual rights and limiting discrimination against trans people [7].

Despite progress in the recognition of trans identities, there remains a relatively small body of research investigating attitudes towards trans people when compared to that concerning attitudes towards gay, lesbian or bisexual people [25]. Alongside the absence of empirical research, the lack of theories to contextualise explicative models for transphobia has also been noted. [26]. Recent studies have concluded that prejudice towards trans people is greater than towards the rest of the LGBTIQ + groups [27]. Clearly, in order to evaluate the social and sexual well-being experiences of trans people within a specific sociocultural framework, it is necessary to understand the attitudinal norms that surround them. Attitudes towards sexuality are sexual predispositions influenced by cultural norms and consist of affective, cognitive and behavioural elements [2]. Erothophobic attitudes towards trans identities and people can justify discriminatory behaviours, violence and even murder. For instance, Trans Murder Monitoring which is part of Transrespect versus Transphobia Worldwide (TvT) undertakes an ongoing comparative qualitative-quantitative research project initiated by Transgender Europe (TGEU) in which more than 150 countries participate. They have registered a total of 3664 deaths since it was implemented in 2009 to the present. As this organization indicates, these murders have increased from 2019 to 2020 by 6% from 331 to 350. Other studies indicate that the most negative attitudes are towards individuals and groups which are also additionally vulnerable. For example, trans women represent 98% of total deaths, 79% of deaths in the USA were black trans women, 62% were trans women prostitutes and 82% of the deaths occurred in Central and South America where Brazil registered 42% of the total deaths. These data are considered to be skewed by the underreporting of some of these deaths. In the United Kingdom, reported deaths due to transphobia have risen to 7 since 2009, considered approximately 1 per year [28]. However, the number of reported hate crimes motivated by someone's transgender lifestyle increased in England and Wales from 2019 to 2020, rising to 2451 complaints in 2020 [29]. The stigmatisation of trans individuals is being mobilised to justify violence exercised by radical and oppressive groups against this community [30]. Reducing prejudice is hampered by the lack of protection offered to different gender identities and sexual orientations worldwide.

Transphobia can comprise two types of attitudes, the manifest or direct and the subtle or indirect [31,32]. These prejudices being closely related to Glick and Fiscke's theories of ambivalent sexism [26,33]. Manifest transphobia is considered to be associated with a hostile rejection which is marked by negative attitudes and behaviours expressed towards trans people. Subtle transphobia is an indirect way of devaluing and denigrating trans individuals. In the same way, there are manifest and subtle behaviours in relation to homophobia or biphobia [14,34]. Subtle predispositions in the United Kingdom are the most present and also more complex and challenging attitudes and behaviours to eradicate because they remain hard to detect. Those people with these predispositions may feign positive attitudes towards trans people [35]. There has also been a rise in transphobia emerging from the more conservative ideals associated with the TERF (Trans-Exclusionary Radical Feminist) movement. These arguments against trans people cannot be sustained from feminism because the trans movement helps to limit the dichotomy of sexual roles and, in fact, contributes to feminism by arguing for gender equality and further contributing to the richness of the diversity of human sexuality [36].

Not only do trans people experience negative attitudes resulting in stigmatisation and discrimination, but also the concomitant costs of that experience in terms of resisting them, and the serious consequences for their physical and mental well-being. Not surprisingly, trans people experience disproportionate rates of psychological distress. In a US national survey of 6456 trans adults, it was reported that 41% of respondents had attempted suicide. The national average is less than 2% [37]. The psychological processes that occur as a result of manifestations of transphobia can encourage this psychological discomfort. Certainly, Minority Stress Theory can be considered a relevant model to understand how the discrimination process affects trans people and to explain the psychological impact and influence

on the well-being of identity minorities. This model has been postulated from various psychological and social theories that are described as the relationship between the cost of the conflict that occurs between minority and dominant values in the social environment experienced by these minority groups [38]. This theory takes into account that stressors introduced in a hostile culture and with transphobic attitudes can cause trans people to develop coping mechanisms that could have a negative impact on their mental health. They include stress processes generated from lived experiences of prejudice, internalised transphobia, expectations of rejection, mitigating coping processes and concealment [39].

The maintenance and perpetuation of prejudice towards trans people can be studied through other group theories strongly related to development and personality variables. These can be explained via the Social Domination Theory (SDO), which argues that there is an establishment of hierarchies between social groups and that those who achieve power tend to ensure that it remains stable and perpetuates itself (e.g., cisgenderism privilege). This theory in turn is strongly related to the ideological variable "Right-Wing Authoritarianism" which demonstrates that people who adhere to these ideas tend to submit to the authority that they perceive as legitimate and stick with the established sociocultural rules and display hostility and seek to be punitive towards those that they consider do not comply with said norms. In this case, those norms can feed the unleashing of transphobic attitudes [40].

Thus, transphobic attitudes and their transformation into actions result in discrimination and stigmatisation which have a strong impact on the health of trans people. Given this fact, it is essential to undertake research that explores transphobic predispositions, their continuity and their transmission. [25].

As mentioned above, there is interest in theorizing and understanding different gender identities in order to develop interventions that can help future professionals to protect and to guarantee the rights of trans individuals and also make progress towards more inclusive and sustainable societies. According to Van Anders [14], the social movement that has started with the aim of limiting negative attitudes towards gender diversity is now causing us to begin to recognize and respect the existing trans people. Harbaugh and Lindsey [41] and Kwok and Wu [42] state that, due to the high levels of discrimination against trans people, it is necessary to learn to detect negative attitudes towards this gender identity. In addition, heterosexual and cisgender people continue to be the groups with the highest adherence to prejudicial attitudes towards trans individuals and among them cis and straight men rank higher in relation to other individuals [35].

In this study, we take into account transphobia in the context of young people's university experience, since our sample is composed of undergraduates. Universities do not have sufficient means to overcome on their own the stigmatisation and marginalisation of trans people because cisnormative social norms continue and wider contextualising social change is lacking. However, LGBTIQ+ student associations are improving the quality and representation of these learners on campus, but academic changes that take into account the experiences of trans people continue to occur unevenly in university studies and they are mainly in areas of knowledge related to literature, audio-visual media, plastic arts, advertising, education and health [43]. This situation makes trans people opt for training spaces that are perceived to be safer and more respectful, choosing feminised careers such as education and nursing and studies related to art and humanities. In this way, engineering and socio-economic and legal sciences are perceived as less desirable fields of study due to the symbolic barriers to learning for trans people. Nevertheless, the problem lies mainly in its lack of detection, widespread misinformation and interventions in the university community aimed at reducing the negative attitudes of teachers and students [44].

This highlights the importance of identifying and developing reliable indicators that measure transphobic attitudes in order to support the training of individuals and the educational plans of organizations as they relate to the inclusion of trans people and reduction of transphobia. In addition, it is necessary to develop theoretical and psychometric instru-

ments sufficient and adequate to research the prejudices towards trans people in order to allow exploration and understanding of the opinions, knowledge, predisposition that the cisgender and heteronormative population holds towards gender minorities. This will enable the assessment of changes in the attitudinal dynamics associated with educational, social and political interventions and the incidence of transphobia [45].

1.2. Contextual Considerations for the Evaluation of Negative Attitude towards Trans People

Research on the explanatory factors for prejudice towards trans people is lacking and, as a consequence, there is little consensus on the means for measuring negative attitudes towards this group. This situation is related to a poorly defined conceptual framework for understanding the hatred that has been directed towards this community [6]. Probably, the most widely recognized instrument used to evaluate this construct is the Gender and Transphobia Ideology Scale (GTS), proposed by Hill and Willoughby [46]. This scale consists of 32 items that assess emotional rejection, violence, harassment and discrimination towards trans people, that is, it can be applied to transphobia and gender harassment in university populations. This scale is strongly and positively correlated with measures of homophobia, right-wing authoritarianism, religious fundamentalism, sexism, propensity for aggression and acceptance of the rape myth. However, an identified limitation of this instrument is that it fails to perform indiscriminate validity tests and lacks factorial analytical procedures [6,46].

Winter et al. [47] evaluated this construct in a cross-cultural way in seven countries, identifying as a limitation that it focused especially on predispositions towards trans women in university students, without including the rest of trans identities. Other studies in Sweden, such as those of Landén and Innala [48], analysed the opinions of 668 persons drawn from the general population, focusing on the reassignment of sex and the rights of this group. Although in this study they found a majority were supportive of the rights of trans people, the least support was expressed for the payment of health care costs during sex-transition (with 63% opposed) and the right of transgender people to adopt and raise children (with 41% opposed) [43]. The limitation of this study was that an integrated instrument was not developed, because the constructs were evaluated separately reducing the capability to draw causal attributions. In Latin America, Rottenbacher de Rojas [49] created a scale that related political ideology with homophobia and transphobia, but it is a scale more focused on evaluating prejudice towards sexual diversity than towards the trans community.

Other more recent scales dedicated to measuring negative attitudes towards trans people include the Transgender Attitudes and Beliefs Scale [50]; the Attitudes Towards Transgender Individuals Scale [51]; and the Transphobia Scale [52]. However, in the systematic review by Morrison et al. [53], it was found that these scales did not comply with the recommendations for the validation of scales, as they had only been developed through reviews of the literature, without taking into account experts in the area, and the audience or the interested parties to which they were targeted [54]. Finally, the most recent scale that measures negative attitudes towards trans people is the Transgender Knowledge, Attitudes and Beliefs (T-KAB) Scale. This comprises 22 items and has been a more rigorously developed instrument based on previous qualitative and quantitative research. However, it also comes with limitations associated with the lack of accounting for competent authorities on transgender matters, by focusing only on the white population of the United States without taking into account other minorities and by the long time that it takes to complete [50,55,56].

In general, in these studies, people with more unfavourable attitudes towards transgender people tended to be men more than women; heterosexuals more than LGBTIQ+ people, older people, of lower socioeconomic status, and with high levels of religiosity. These findings could support the indicator that these negative attitudes towards trans people are based on group prejudice [46–49]. For this, it is necessary to develop psychometric instruments that adequately measure negative predispositions towards trans people

as well as their relationship with the social, sociodemographic and political variables of the population.

In order to reliably assess and periodically measure the current attitudes of the population towards trans people, we sought to validate in English the Scale of Negative Attitudes towards Trans People ("*Escala de Actitudes Negativas hacia las personas Trans*", EANT) of Páez et al [6]. This has previously been validated in Spanish in samples comprising of general populations and also university students. This scale has some evident strengths including that it is easy and quick to apply because it is made up of nine items that assess in a one-dimensional way the existing negative predispositions towards trans people. In this way, it is intended to address the deficiencies observed in other scales that seek to assess negative attitudes towards trans people because it has been developed with reference to a wide and exhaustive review of the existing literature, by experts on the subject, has an evidential basis in qualitative research and has greater ecological validity as it has been given to ethnic groups within a range of Spanish-speaking countries. In this study, we also intended to compare, by groups, the results obtained in order to discover whether they are similar to those evaluated in the previous literature and in the construction of this scale by Páez et al. [6]. The intention, therefore, is that this scale can reveal new ideas about how gender identity is perceived in today's society, based on the trends and structuring of this prejudice in order to monitor the advances obtained through educational and legislative recognition and in order to underpin interventions.

2. Materials and Methods

2.1. Design

This is a non-experimental, descriptive, cross-sectional and quantitative study based on a survey composed of standardised scales used to assess sexual behaviours and attitudes. The participants in this study were 362 university students from the United Kingdom. The outcome variables were those derived from the following three scales: the Scale of Negative Attitudes towards Trans People (EANT) [6], the Heterosexual Attitudes Toward Homosexuality Scale (HATH) [57] and the Transgender Inclusive Behaviour Scale (TIBS) [34]. In addition, the predictor variables were based on sociodemographic details: age, gender, sexual orientation, marital status, nationality, religious adherence, university field, training in sex education and parental education.

2.2. Participants and Procedure

The study population consisted of 362 participants aged 18 to 45 years (M = 21.43, SD = 3.42), of whom 228 identified with cisgender women, 119 cisgender men, 11 people with non-binary genders and 4 preferred not to say so. Respondents had to be university students to voluntarily participate in this study and be over 18 years of age. Due to the exceptional pandemic situation, the procedure was adapted to an online modality, thus abandoning the probabilistic criteria initially foreseen in the initial study design. The online questionnaire was approved by the Ethics Committee of the UK University involved in the study. The students were recruited online using an opportunistic sampling method, the links to the survey were sent to the students' email and completing it took approximately 12 min. Data was collected online for six months from 12 February 2020 to 18 August 2020. Finally, the data were collected, computerised and analysed through IBM SPSS 24.

2.3. Measures

The main aim of this study was to validate the EANT but concerns about negative attitudes and behaviours towards sexual diversity were also assessed. Thus, the study instrument was built using the Jisc Online Surveys Program (2020). This questionnaire was divided into four sections: section A contains seven self-elaborated questions on personal data such as age, nationality, gender, sexual orientation, marital status, religion and university course; section B contains four questions about sexual education received and opinions in relation to this training; section C contains the three standardised scales mentioned

above; and finally, section D contains two self-elaborated questions on comments and suggestions. Each respondent was informed that their participation would be anonymous, through a participant information sheet, consent form and a participant debrief.

The Heterosexual Attitudes Toward Homosexuality scale (HATH) was used to evaluate the manifest discrimination towards homosexuals through 20 items. It also significantly correlates with group pressure, religiosity and authoritarianism [56]. The responses are structured around a five-point Likert scale (1 = totally agree to 5 = totally disagree). This scale is very important for the validation of the EANT because it was used as a reference scale for its construction and for its convergent validation, due to its close relationship of constructs. Internal consistency in previous HATH studies was highly reliable with Cronbach's Alpha (α) = 0.92 in a sample of 200 university students [57]. In our study, we obtained excellent reliability with α = 0.96 and the mean score was 27.09 (N = 362, *Min* = 20, *Max* = 100 and *SD* = 12.01; a score closes to the minimum, 20, indicates more attitudes positive towards homosexuality).

The Scale of Inclusive Behaviours towards Trans people (TIBS) [34] was used to assess inclusive behaviours towards transgender people and any enhancing effects of inclusive interventions that have been promoted today. This scale is considered a useful instrument to assess the inclusiveness of transgender people at the individual, group and community level. The scale of Kattari et al. [34] presented excellent reliability with an α of 0.93. In our study, excellent reliability was obtained with α = 0.95 and the mean score was 36.70 (N = 344, *Min* = 15, *Max* = 75 and *SD* = 14.81; scores close to the maximum, 75, indicate more inclusive behaviours towards trans people). However, this scale was not answered by 18 subjects who left it unanswered.

The Scale of Negative Attitudes towards Trans People (EANT, "*Escala de Actitudes Negativas hacia las personas Trans*") [6], is the scale that we aimed to validate in English in this research. It is used to assess negative attitudes towards transgender people and is similar to the Negative Attitudes Towards Homosexuality Scale (HATH) but focuses on negative predispositions towards transgender people. This scale is made up of nine items with Likert-type response options ranging from 1 = totally disagree to 5 = totally agree. Scores are obtained by adding the values of each of the items and range from 9 to 45 with higher punctuation indicating more positive attitudes and less prejudice towards trans people. Specifically, the presence of prejudice towards trans people is considered low in mean scores between 9 and 21, the presence of moderate prejudice between 22 and 34 and the presence of very transphobic attitudes between 35 and 45 [58]. In the study by Páez et al. [41], the reliability of the scale is good with an α of 0.90 in 173 university students. In our study, we obtained high reliability with α = 0.81 and the mean score was 17.24 (N = 362, *Min* = 12, *Max* = 41 and *SD* = 5.65).

2.4. Analysis

The results were explored before examining the normality of the characteristic data of the sample. A non-normal distribution was observed in the mean scores of the scales by performing the Kolmogorov–Smirnov test. This analysis revealed a $D(362) = 0.32$ $p < 0.001$ for the HATH; $D(362) = 0.21$ $p < 0.001$ for the EANT; and $D(344) = 0.09$ $p < 0.001$ for TIBS. However, according to other scientific studies, parametric statistics could be applied in larger sample sizes due to the robustness of these tests, even when there are slight differences in the distribution that do not follow the norms of normality [59–67].

One of the objectives of this research is to compare groups and clarify the possible relationships between their variables. For these purposes, the Student's t-test and ANOVA are considered for the comparison of independent samples and the Pearson correlations between the scores of the different scales. In our study, we consider the p values significant when this number is less than 0.05 and very significant when the values are less than 0.001 [59]. In relation to the effect of the sample size calculated for the t-test, the Cohen's d measure is used, which is interpreted considering that $d = 0.200$ will be a small size, $d = 0.50$ will be a medium size and $d = 0.80$ will be a long effect size [63]. The effect of sample size

calculated for the ANOVA test is calculated using the eta squared ($\eta_p{}^2$) which is interpreted considering that $\eta_p{}^2 = 0.01$ is a small size, $\eta p^2 = 0.06$ is a medium size and $\eta_p{}^2 = 0.14$ is a long effect size [67]. The values of the correlations are considered small from ± 0.10 to ± 0.29, medium from ± 0.30 to ± 0.49 and long to perfect from ± 0.50 to ± 1.00 [61].

3. Results

3.1. Piloting the English Version of the EANT

The objective of this study was to conduct a pilot of the EANT in a university population within the United Kingdom. The method involved carrying out a simple translation, the construct of which was analysed by experts on this subject and finally sent to British university students for validation. It is a Likert-type scale, with five response alternatives of ordinal measure from 1 to 5, where 1 expresses Strongly disagree, 2 Disagree, 3 Undecided, 4 Agree and 5 Strongly Agree. Of the nine items, item 1 is negatively stated so they must be inverted in the database. However, in the English version, if we presented the items following the version of the Anglo-Saxon Likert scales, we should invert all the items except item 1 because they are published in a different way than the Spanish context. The translated scale items and their final version are listed in Table 1.

Table 1. Scale of Negative Attitudes towards Trans People (EANT).

Nº	Items
1 *	It is okay for a transgender person to adopt children.
2	Transgender people should not be able to teach in schools.
3	Sex with a transgender is not natural.
4	Transgender people are a threat to the family and to society.
5	Transgender people tend to be sexually promiscuous
6	It would be shocking to see a transgender person kissing.
7	It would bother me if my child is a transgender person
8	Transgender people are more likely than the rest of society to contract a sexual illness.
9	Transgender females are homosexuals dressed as women.

* Reverse item.

3.2. EANT Reliability and Validity

To conduct the initial exploration of the items that make up the scale, we opted for a cross-sectional experimental investigation. In the first phase, the items were translated after a pilot test with a group of undergraduate students; the scale was maintained with the nine items of the EANT. Subsequently, the exact same validation process that the author of this scale carried out was followed [6]. However, the wording was modified in some items where we determined that it could improve the precision of meaning. This was either because the words did not adapt to the British socio-cultural context or because they used complex expressions.

To establish its validity, we undertook an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA). As a research sample was available, it was randomly divided into two subsamples, in study 1 with the first sample, the EFA was applied to explore the factorial structure underlying the items and with the second sample, in study 2, we aimed to confirm the structure. The random division of the two subsamples consisted of selecting the first 180 subjects for the AFE and the remaining 183 constituted the second sample for the CFA. It is worth highlighting the adequacy of sample size for this analysis. The number of participants was 20 times larger than the number of variables or items.

3.2.1. Study 1: Exploratory Factor Analysis

The objective of the first study was to test the initial set of items to build a suitable instrument theoretically and psychometrically for the measurement of this construct. For this purpose, the reliability analysis and external validation were carried out. The participants were 180 students from a northern British University between 18 and 45 years old ($M = 22.19$, $SD = 4.36$), selected through an accidental non-random sampling. Of them, 119

identified themselves as female, 53 as male, 6 as non-binary genders and 2 people preferred not to answer.

Through this analysis, the dimensions of the EANT scale were investigated. The Bartlett sphericity test was performed and the Kaiser, Meyer and Olkin (KMO) sample adequacy measurement index was calculated, as well as the significance levels by principal components and Varimax rotation with Kaiser normalisation. These analyses are adequate to establish differences in the structure if there were underlying scales [6]. The minimum factor saturation limit was set at 0.40, we decided to omit all loads lower than this value. In relation to the items that presented a similar saturation in two or more factors, we proceeded to add them to those that saturated higher, considering the theoretical criteria. Subsequently, bivariate inter-item correlations were obtained to be able to observe the relationships between them. [68].

Finally, in the items retained by the EFA, the analysis of reliability and internal consistency of the suppressed items as well as the total of them was carried out. If there is an item that increases α and theoretically it is not well-founded, its elimination is suggested. To investigate the external validity, simple bivariate correlations were performed between the scale scores with sociodemographic study variables. These were evaluated taking into account the agreed-upon evidence in the previous literature [6] and the Pearson correlation index.

Reliability and Items Analysis of the EANT in Study 1

Table 2 shows the EANT internal consistency of the first subsample, the means, the variances of their nine-item and item-total correlation coefficients and αs of the deleted element in this subsample.

Table 2. Study 1: EANT internal consistency.

Item	M [1]	Var [2]	CI-T [3]	A [4]
1/EANT1	12.88	40.67	−0.73	0.92
2/EANT 2	15.97	25.07	0.76	0.78
3/EANT 3	15.68	23.66	0.76	0.78
4/EANT 4	16.06	26.08	0.75	0.79
5/EANT 5	15.54	24.13	0.73	0.78
6/EANT 6	15.97	25.44	0.79	0.78
7/EANT 7	15.55	23.12	0.73	0.78
8/EANT 8	15.59	24.81	0.66	0.79
9/EANT 9	15.92	25.27	0.71	0.78

[1] M = mean scale (item deleted). [2] Var. = scale variance (item suppressed). [3] CI-T = Item-total correlation. [4] α = Cronbach's alpha (element deleted).

As can be seen in these tables, the correlations obtained between each item and the corrected scores on the scale in all cases were much higher than 0.30. In accordance with the recommendations of Líbano et al. [69], in the selection process of items, those that differentiate the extreme groups or that have item-total correlations greater than 30 should not be eliminated [68]. In this case, no item had to be eliminated because they had significant correlations with the total of the scale and gave higher Alphas. In addition, this measurement instrument was analysed according to the original version validated in Spanish by Páez et al. [6]. No component or factor was obtained that was not in the total calculation of the scale as in the previous literature. In this subsample of the EANT, a high internal consistency was obtained with $\alpha = 0.827$ and a mean correlation of the items of 0.33. Finally, the mean score of the first subsample of the EANT was 17.40 ($n = 180$, *Min* = 12, *Max* = 36 and *SD* = 5.72).

Exploratory Factor Analysis

EFA enables us to explore the set of latent variables or common factors that explain the responses to the items on this scale and to find composite dimensions formed by the

summarised information that is contained in the original variables. Prior to factoring, the KMO and the Bartlett sphericity test were performed [69]. Previously, the results obtained in the KMO show a high value of 0.93 which indicates that the idea of performing the factor analysis is good. On the other hand, the findings obtained in the sphericity test ($\chi2 = 1170.163$, $gl = 36$, $p < 0.001$) reveal that there are significant relationships between the items and thus it is appropriate to perform the EFA.

The EFA returns a factorial solution composed of a factor (Table 3) coinciding with the validated scale of Páez et al. [6]. This component explains 65.87% of the total variance. All this indicates the convenience of maintaining the analysis of the construct of the one-dimensional version of the original scale.

Table 3. EANT component matrix.

	Components
Item	**1**
2	0.89
4	0.85
6	0.84
7	0.83
9 *	0.81
3	0.80
1	−0.80
5	0.76
8	0.72

* Reverse item.

Validity Analysis between Study 1 Variables

The results shown in Table 4 show the existence of a very high correlation between the scale that is intended to validate the EANT and the TIBS ($r = -0.54$, $p = 0.001$) and in turn, the HATH ($r = 0.79$, $p = 0.001$), which shows the relevance of its use to measure predispositions towards the evaluation of attitudes towards sexual diversity and is clearly related to instruments that measure inclusive behaviours. These results are important because to develop the EANT scale, its authors relied on the HATH items with which they considered it should correlate highly [44]. These findings indicate that positive attitudes towards trans people are related to more inclusive conduct and more homophilic attitudes. In relation to the previous literature, small correlations were found that indicated that there were more negative attitudes at an older age ($r = 0.17$, $p = 0.020$).

Table 4. Relationship between Study 1 variables.

|	**EANT**	**TIBS**	**HATH**	**EDAD**
EANT	1			
TIBS	−0.54 **	1		
HATH	0.79 **	−0.33 **	1	
EDAD	0.17 *	−0.20 **	0.22 **	1

* $p \leq 0.050$, ** $p \leq 0.010$.

3.2.2. Study 2: Confirmatory Factorial Analyses

The second subsample consisted of 182 students from the northern British University between 18 and 28 years old ($M = 20.68$, $SD = 1.83$), selected through accidental non-random sampling. Of them, 109 identified themselves as female, 66 as male, 5 people with other genders (mainly non-binary) and 2 people preferred not to answer.

The CFA was performed because no missing values were found since respondents answered all questions. This analysis allowed for corroboration of the findings obtained in the EFA of study 1 [69,70]. To achieve this, the following statistics were taken into account, firstly, the Chi-square index ($\chi2$) that allows us to indicate the discrepancy between the

models developed and the covariance of the data. Furthermore, it is sensitive to sample size. Second, it is also necessary to consider the goodness of fit index (AGFI) that should present values greater than 0.90, the comparative fit index (CFI) that should exceed values of 0.900 and the quadratic error index that should be less than 0.80. Finally, it is important to consider the ratio between the index and the degrees of freedom of the model (CMIN/DF) being a value less than 3, which is considered to be a good fit of the model [6]. In addition, a maximum likelihood model was used and standardised estimators, indirect and direct total effects and covariance estimates were requested. The CFA was performed with the AMOS statistical software that is compatible with the SPSS program.

　　The unifactorial structure obtained without adjusting the modification indices presented a ratio value of the $\chi2$ statistic and the degrees of freedom considered not optimal (*CMIN/DF* = 2.86; *Df* = 27, $\chi2$ = 77.31) and an *AGFI* = 0.85, a *CFI* = 0.96 and a *RMSEA* = 0.10, which are not entirely acceptable. The reagent estimates were significant and acceptable, that is, from 0.59 to 0.90 (see Figure 1). Figure 2 shows the CFA with a link between error e5 with error e8, which suggested the modification indices. The unifactorial structure obtained with this modification presented a ratio value of the statistic $\chi2$ and the degrees of freedom considered optimal (*CMIN/DF* = 1.93; *Df* = 26, $\chi2$ = 50.28) and an *AGFI* = 0.90, a *CFI* = 0.98 and a *RMSEA* = 0.07, which are acceptable. The estimates of the items were significant and acceptable, that is, from 0.58 to 0.90. These results are very similar and even better than those obtained in the study of the original version by Páez et al. [6].
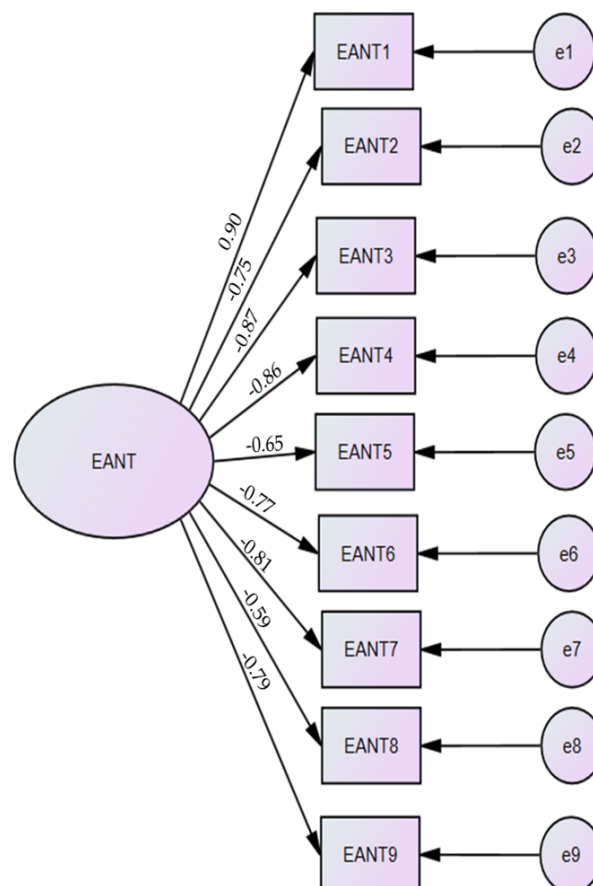
Figure 1. EANT Internal unifactorial structure. (Chi square = 77.13, df = 27, p = 0.001, gfi = 0.91, agfi = 0.90, rmsea = 0.10, ifi = 0.96, tli = 0.94, cfi = 0.96).
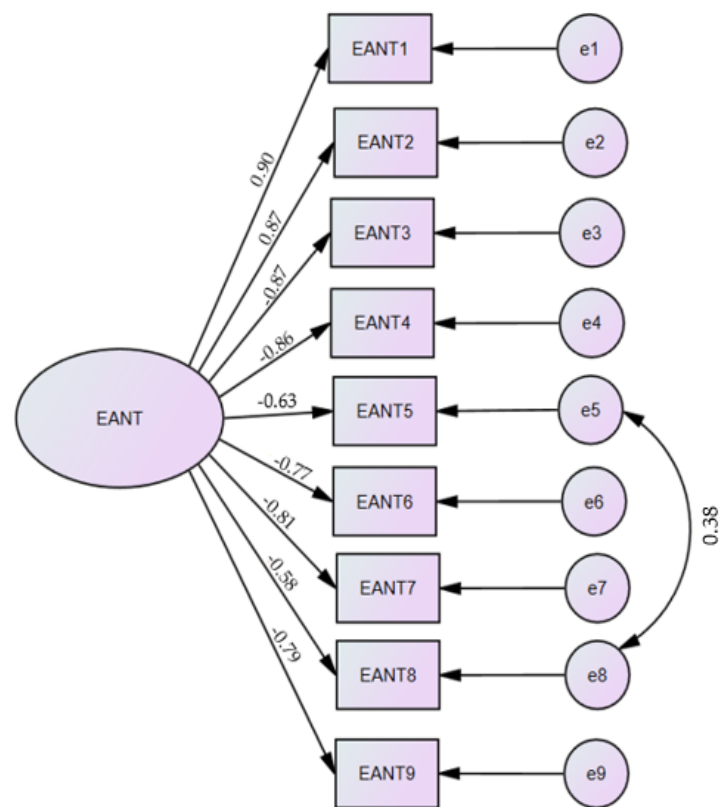
Figure 2. EANT internal factorial structure suggested by the modification indices. (Chi square = 50.28, df = 26, p = 0.003, gfi = 0.94, agfi = 0.90, rmsea = 0.07, ifi = 0.98, tli =0.97, cfi = 0.98).

Reliability and Items Analysis of the EANT in Study 2

Table 5 shows the internal consistency of the EANT of study 2, the means, the variances, item-total correlation coefficients and αs of the deleted element in this subsample.

Table 5. EANT internal consistency of study 2.

Item	M [1]	Var [2]	CI-T [3]	A [4]
1/EANT1	12.50	40.89	−0.87	0.91
2/EANT 2	15.71	24.41	0.65	0.75
3/EANT 3	15.46	21.67	0.80	0.72
4/EANT 4	15.70	23.40	0.82	0.73
5/EANT 5	15.32	23.76	0.64	0.75
6/EANT 6	15.74	24.87	0.73	0.75
7/EANT 7	15.21	21.10	0.68	0.74
8/EANT 8	15.33	23.76	0.59	0.76
9/EANT 9	15.63	23.60	0.75	0.74

[1] M = mean scale (item deleted). [2] Var. = scale variance (item suppressed). [3] CI-T = Item-total correlation. [4] α = Cronbach's alpha (element deleted).

As can be seen in these tables, the correlations obtained between each item and the corrected score on the scale in all cases were greater than 0.30. In accordance with the recommendations previously exposed by Líbano et al. [69], we preferred to continue using the original EANT analysed in the exploratory factor analysis, although when changing item 1 (inverse item), the Cronbach's Alpha of the scale changed substantially but it was decided not to eliminate any of the items since they had significant correlations with the total of the scale and the CFA confirmed their validation. In the EANT, an acceptable internal consistency was obtained with an Alpha of 0.79 and a mean correlation of the items of 0.30. Finally, the mean EANT score was 17.08 (*n* = 182, *Min* = 13, *Max* = 41 and *SD* = 5.58).

Validity Analysis between Study 2 Variables

The results shown in Table 6 show the existence of a very high correlation between the original scale (EANT) with the TIBS (r = −0.54, p = 0.001) and with the HATH (r = 0.86, p = 0.001), which shows the relevance of its use to measure predispositions towards sexuality and to be related to instruments that measure inclusive behaviours. These results are important because, as we have said previously, to develop the EANT scale, its authors based it on the items of the HATH with which they considered that it should correlate highly [6]. These findings indicate that positive attitudes towards trans people are related to more inclusive behaviours and more homophilic predispositions. In relation to the previous literature, a small correlation was found that indicated that there were more positive attitudes at an older age, (r = 0.18, p = 0.01). These results agree with the sample carried out in the AFE.

Table 6. Relationship between Study 2 variables.

	EANT	TIBS	HATH	EDAD
EANT	1			
TIBS	−0.54 **	1		
HATH	0.86 **	−0.42 **	1	
EDAD	0.18 *	−0.10	0.18 *	1

* $p \leq 0.050$, ** $p \leq 0.010$.

3.3. EANT Analysis in the Total British Sample

Although previously validated in Spanish, this scale has not been validated in English, so the internal consistency of the EANT in this British sample is analysed below. In addition, Table 7 shows the means and variances of the EANT, item-total correlation coefficients and Cronbach's Alpha of the deleted item in this entire population.

Table 7. EANT internal consistency in the total sample.

Item	M [1]	Var [2]	CI-T [3]	A [4]
1/EANT1	12.69	40.70	−0.80	0.92
2/EANT 2	15.84	24.69	0.71	0.77
3/EANT 3	15.57	22.61	0.78	0.75
4/EANT 4	15.88	24.69	0.78	0.76
5/EANT 5	15.46	23.89	0.68	0.77
6/EANT 6	15.86	25.10	0.76	0.76
7/EANT 7	15.38	22.07	0.70	0.76
8/EANT 8	15.46	24.23	0.62	0.77
9/EANT 9	15.77	24.38	0.73	0.76

[1] M = mean scale (item deleted). [2] Var. = scale variance (item suppressed). [3] CI-T = Item-total correlation. [4] α = Cronbach's Alpha (element deleted).

As can be seen in these tables, the correlations obtained between each item and the corrected scores on the scale in all cases were greater than 0.300. In accordance with the recommendations set forth in the previous scales [68,69], we preferred to continue using the version of the EANT [6] and it was decided not to eliminate any of the items, since they had significant correlations with the total of the scale and had been previously validated in Spanish, despite what was previously stated in item 1. A high consistency was obtained in the EANT internal with α=0.810 and a mean correlation of the items of 0.322.

3.3.1. Comparison of Means and Nominal Variables of the Scale

At the same time and in order to discover the versatility of the scale, it is intended to compare the results of the scale following the process carried out by Páez et al. [6] in which it was compared by groups to analyse variables of interest related to this construct. Table 8 shows the comparative analysis and means according to the t-test for independent samples,

in order to analyse differences in the responses of the scale by gender, sexual orientation, nationality, religious adherence and marital status.

Table 8. Differences by criterion variables in the British sample.

Variables		t	df	p	Cohen's d	
					d	95% CI
Gender, *M(SD)*						
Female 15.80 (4.10) n = 228	Male 20.06 (6.77) n = 119	−7.27	345	0.001 **	−0.82	−1.05, −0.59
Nationality, *M(SD)*						
British 16.37 (4.83) n = 280	Other nationality 20.19 (7.096) n = 82	−5.61	360	0.001 **	−0.70	0.95, −0.45
Sexual orientation, *M(SD)*						
Heterosexual 18.76 (6.28) n = 214	LGBTIQ+ 15.04 (3.61) n = 148	6.503	360	0.001 **	0.69	0.48, 0.91
Civil state, *M(SD)*						
Single 17.72 (5.80) n = 246	Other civil status 16.21 (5.19) n = 116	2.385	360	0.02 *	0.27	0.05, 0.49
Religion, *M(SD)*						
Believers 19.57 (7.11) n=106	Non-religious 16.30 (4.61) n=254	5.191	358	0.001 **	0.60	0.37, 0.83

* $p \leq 0.05$, ** $p \leq 0.01$.

In relation to the previous literature found, the scores on the scales indicated that of the groups of variables analysed, women, people from the LGBTIQ+ community, and non-religious people had fewer negative predispositions towards trans people with differences in the effect of size medium to large. Significant differences were also found by marital status, but these were small.

Table 9 shows the comparative analysis and means according to the ANOVA test for independent samples with more than two people in the groups, in order to analyse differences in the responses of the scale by branch of knowledge and university course. Attitudes towards trans people were more positive in Science, Health Sciences and Humanities students compared to the rest of the branches of knowledge.

Table 9. Differences by university field and course.

Variables						F	df	p	η_p^2
University Field *M(SD)*									
Humanities 16.46(4.99)	Social Science 18.20(6.04)	Science 15.46(3.71)	Health Science 16.96(5.14)	Engineering 19.71(7.58)	Other 17.61(6.17)				
n = 93	n = 70	n = 47	n = 82	n = 42	n = 28	3.50	5, 361	0.004 *	0.05

* $p \leq 0.05$, ** $p \leq 0.01$.

Table 10 also shows the comparative analysis according to the ANOVA test for independent samples with more than two people in the variables based on the educational level of the mothers and fathers or legal guardians. Attitudes towards trans people were more positive in students whose mothers and fathers had a higher level of education, although positive attitudes were also found in students with parents with Level 1 education and more negative in those with Level 4 education.

Table 10. Differences by educational level of legal guardians.

Variables						*F*	*df*	*p*	η_p^2
Educational level of fathers or legal guardian, M(SD)						3.79	5, 358	0.002 *	0.05
Entry Level 24 (7.90) *n* = 5	Level 1 15.89 (4.90) *n* = 58	Level 2 17.63 (5.70) *n* = 94	Level 3 16.53 (4.90) *n* = 129	Level 4 18.96 (6.89) *n* = 59	Level 5 17.21 (5.83) *n*=14				
Educational level of fathers or legal guardian, M(SD)						4.62	5, 357	0.001 **	0.06
Entry Level 23.50 (5.83) *n* = 10	Level 1 16.2 (5.32) *n* = 73	Level 2 16.21(4.40) *n* = 86	Level 3 17.85 (5.89) *n* = 106	Level 4 18.23 (6.62) *n* = 64	Level 5 15.73 (4.58) *n* = 19				

$* p \leq 0.05, ** p \leq 0.01.$

Finally, these results suggest that the items are relevant to instrumentalise a measurement of sexual prejudice towards trans people because they are related to the variables analysed in the previous literature and factors related to their discrimination and social differences [6,68].

3.3.2. Construct and Criterion-Related Validity

The results shown in Table 11 show the existence of a very high correlation between the original scale (EANT) with the TIBS (r = -0.54, p = 0.001) and with the HATH (r = 0.83, p = 0.001), which shows the relevance of its use to measure predispositions towards sexuality and to be related to instruments that measure inclusive behaviours. These results are important because to develop the EANT scale, its authors relied on the HATH items with which they considered that it should correlate highly [6]. These findings indicate that positive attitudes towards trans people are related to more inclusive behaviours and more homophilic attitudes. In relation to the previous literature, small correlations were found indicating that there were more negative attitudes at older age, (r =0.16, p = 0.002) and when education was imparted at a higher educational level (r = 0.11, p = 0.046) through non-scientific means (r = 0.14, p = 0.006).

Table 11. Relationship between study variables.

	EANT	TIBS	HATH	FES [1]	ESMC [2]	EDAD
EANT	1					
TIBS	−0.54 **	1				
HATH	0.83 **	−0.38 **	1			
FES	0.11 *	−0.06	0.21 **	1		
ESMC	0.14 *	−0.16 **	0.11 *	−0.04	1	
EDAD	0.16 *	−0.18 **	0.20 **	0.06	0.08	1

$* p \leq 0.05, ** p \leq 0.01.$ [1] FES: Training level of Sex Education by academic stage. [2] ESMC: Sex Education obtained from scientific means.

4. Discussion

The results of this study comprising an evaluation of the psychometric properties of the English version of the EANT demonstrate that it may be considered internally and externally validated. The findings obtained in its validation in English are very similar to those obtained by Páez et al. [6] with respect to its validation in Spanish, giving scientific

rigor to the evaluated construct. The EANT in this English version is also presented as a one-dimensional structure both when conducting the exploratory and confirmatory factor analyses and its reagents assess overt attitudes towards trans people.

Consistent with the previous literature, the differences between the means of the groups of study variables have been significant with medium to large effect sizes, indicating that gender, nationality, sexual orientation and religious adherence are discriminating variables of attitudes towards trans people. Nationality is an important variable because it is related to the legislative, educational and cultural variables of a country at a particular time [71,72]. In addition, large correlations were also obtained with other related constructs that measure negative predispositions towards homosexual people (HATH) and inclusive behaviours towards trans people (TIBS) [34]. These results are consistent with the findings obtained by Páez, Rabbia, Hevia and Pesci [58] that indicate that they are related to conservative attitudes in the social sphere and with various sexual prejudices such as those associated with sexual diversity and traditional gender identity. This study shows the transfer hypothesis indicated by Norton and Herek [73], which links prejudice towards the diversity of sexual orientations with prejudice towards trans and non-binary people.

In relation to the results obtained in the educational field, we can confirm the differences found by academic subjects, in which engineering and social sciences (economic and legal) students have shown significantly more transphobia than the rest of the humanistic academic specialties, science and health sciences, coinciding with other previously mentioned studies that have analysed this perspective [44]. As verified by the educational level of the family members, low training is also closely related to negative attitudes towards trans people. This indicates the importance of detecting negative attitudes in other areas such as in the family, at work or in the community in general [43,44]. Therefore, the understanding and detection of these attitudes is crucial to generating interventions appropriate to the context and to promoting gender formations that include trans people in all areas and initiating the change in the education sector that will allow the transfer to the rest of the environments [43]. Despite the fact that social networks and citizen predisposition is positive, the theoretical productions that can describe and explain negative attitudes towards trans people remain scarce and the approaches are inconsistent [73]. Therefore, it is necessary to use tools to facilitate evolution and understanding to reduce this bias. We consider the EANT scale of Páez et al. [6] validated in English to be an easy and quick resource to apply, as well as being useful in detecting negative attitudes towards trans people. It is a relevant instrument for the study of this social problem.

The strengths of this scale are that there are no adequate instruments designed to determine negative attitudes towards trans people in populations of different countries and in this case in English. Most of the new scales assess transphobia using factors related to behavioural inclusion, however, this instrument emphasizes the unfavourable predispositions present towards trans people [58,74–76]. We cannot measure inclusive behaviours if we do not know what the prejudices are that remain latent in society. This scale can enable the measurement of the sociocultural effects of educational measures and the changes in sociocultural norms including the enactment of laws related to the protection of gender diversity. As Páez et al. [6] have explained, it is necessary to understand its application in a variety of contexts, and with its validation in English, it can now become available to a very wide range of states and countries where English is spoken. In addition, this scale, as it consists of only nine items, is very easy to use and potentially integrate into both scientific and public opinion surveys. This would enable a much wider acquisition of information on this construct and subsequent analyses of the impact of changes in the social and legal recognition of different gender identities [76,77].

However, we did experience some strong reactions to the use of this scale. It is therefore recommended that in both the English and Spanish versions it is accompanied by clear information and a warning about its content. This is because some of the items may be perceived to be harmful and were experienced as difficult to read by some participants. Whilst not at all endorsing prejudicial views, the scale does ask for an evaluation of

them and this troubled some respondents. It is also recommended that all the items are formulated in an inverted way, that is, in a positive way as shown below in Table 12. This will contribute to combatting the stereotypes associated with transgender identity and to detecting negative attitudes in a more indirect way. This recommendation also applies to the Spanish version validated by Páez et al. [6]. However, we qualify this noting that the application of the scale must be adapted to specific sociocultural contexts that we intend to measure. For example, the original version may be appropriate for us with adults and cisgender people where it can be used to evaluate attitudes from more direct manifestations. Versions formulated in a positive way that measure prejudice in a more subtle way may be better for use with other more educated groups with more positive predispositions [35,48]. Regardless of formulation, we do consider it necessary to collect manifest attitudes because prejudices towards trans people are still very high in the general population and it is necessary to continue working for the acceptance of gender diversity and the reduction of discrimination [58].

Table 12. Scale of Negative Attitudes towards Trans People (EANT) formulated in a positive way.

N°	Items
1 *	It is okay for a transgender person to adopt children.
2 *	Transgender people should be able to teach in schools.
3 *	Sex with a transgender is natural.
4 *	Transgender people are not a threat to the family and to society.
5 *	Transgender people do not tend to be sexually promiscuous
6 *	It would not be shocking to see a transgender person kissing.
7 *	It would not bother me if my child is a transgender person
8 *	Transgender people are not more likely than the rest of society to contract a sexual illness.
9 *	Transgender females are not homosexuals dressed as women.

* Reverse item.

The correlations are very high with other constructs, but the limitation of this analysis may lie, as pointed out by Páez et al. [6], in the fact that it is a sample composed of university students. It is possible, therefore, that the correlations may be of less intensity as the differences decrease because they are more homogeneous samples. This may indicate the requirement for their validation in the general population, although in the Spanish version it has been validated in this population. Nevertheless, the university population is becoming more representative of the general population, reducing this possible bias. According to Eurostat, the United Kingdom (2,495,800 students) is the European country with the third-highest proportion of university students, representing 12.3% of the total. In 2019, 50% of the British population aged 30 to 34 had completed tertiary education, the European average being 40%. The proportion is increasing every year and is expected to soon reach 60–70% of the population [78]. Another limitation of this study lies in the lack of visibility of minority groups such as black trans people, people from rural areas, individuals with low economic status or the elderly, who are usually not represented when using online surveys. Language is continually changing so some currently validated terms may no longer be appropriate, such as the word transgender, which is tending to be directly replaced by "trans". Adapting language may be important for lexical currency and also to ensure that certain individuals remain comfortable in responding to the survey [34]. As we have pointed out previously, the topic itself may be discomforting to some people and could lead to bias in their responses. There may be particular issues for people who have extremely positive or negative predispositions. Furthermore, the convenience sampling that we used, based on sending the questionnaire to all university students, is far from the best way to recruit a random sample of the population and this study may have included self-selection bias.

Future studies should include replication of the general population, aiming to secure ethnic diversity, diversity in terms of age, economic context and academic training and also work targeted to reach population groups that are not represented in this study. It is necessary to continue evaluating this scale in its original and also our positive version. There is

scope to plug the gap in research involving people who have close social relationships with trans people in order to evaluate intergroup prejudice and the impact of contact and social proximity on the development of predispositions about gender identity that are rooted in our society. In future studies, these predispositions might be compared with other criterion variables such as political ideologies, religious feeling or belief, self-esteem and other series of variables related to other prejudices and predispositions.

In conclusion, few studies focus on exploring the manifest and subtle negative predispositions that are associated with the persistent problems of discrimination towards trans people. To ensure that trans people receive the support and resources they need, we must understand the origin of existing prejudices and begin to promote educational interventions and legislative actions that reduce these and also guarantee inclusion. Hence, in this study, the EANT was validated as a means to identify negative attitudes towards trans people and also to assess the persistence of negative stereotypes and their change over time and, potentially, under the impact of socio-cultural events and changes. Highlighting the negative prejudices that trans people face, creates the potential to raise awareness of existing discrimination towards this gender identity and to generate positive change to support gender diversity from within society.

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