# Study Name:
# Public and Institutional Acceptance of Transgender Persons in Kenya



TEA

TRANSGENDER EDUCATION & ADVOCACY

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# Funding

- Voice - https://voice.global/

# Abbreviations

**GS –** Great Stigma

**GT** – Great Transphobia

**GTS –** Genderism and Transphobia Scale

**HRT** – Hormone Replacement Therapy

**MS** – Moderate Stigma

**MT** – Moderate Transphobia

**NS** – No Stigma

**NT** – No Tranphobia

**TEA** – Transgender Education and Advocacy

**TG** – Transgender

**SDS** – Social Distance Scale

**SRS** – Sex Reassignment Therapy

**WHO** – World Health Organization

# Definitions

- Transgender (TG) people – individuals who have changed or who are changing their sex/gender (Male to female or Female to male).
- Transgender is **NOT** intersexuality or homosexuality/gay
- Transphobia – irrational fear and hatred of transgender persons
- Genderism – Belief that gender is binary and gender aspects are linked to sex assigned at birth/genital sex

# Study Objectives

- Enhance public understanding of levels of social and institutional acceptance of TG Kenyans among Kenyans

- Enhance public understanding of factors that influence social and institutional acceptance and transphobia of transgender persons in Kenya

- Improve implementation of projects that address the real challenges of transgender persons

# Methodology

A. Population-based study

- Data collected from Kenyans (n=30) using telephone interviews

- Respondents' age ≥ 18 years

- Both purposive and random sampling methods used to select respondents

- Consent sought from each respondent before commencing data collection

# Questionnaire

- Three-section questionnaire (See Appendix One)

- A. Demographic data (6 items)

- B. Modified Borgadus Social Distance Scale (8 items)

- C. Modified Genderism and Transphobia Scale (10 items)

# Demographic Data

**Bio data**

1. Age          _____

2. Gender        _____

3. Place of residence          _____

4. Profession          _____

5. Education level   _____

6. Do you know the meaning of the term transgender?

Yes

No

If yes, what is the participants definition of the term transgender

:...............................................................................................................................

.......

# Modified Bogardus Social Distance Scale

**7. Modified Bogardus Social Distance Scale**

Please indicate how comfortable or uncomfortable you would personally feel having a transgender person as:

|  | Comfortable | Uncomfortable |
|---|---|---|
| As a close sibling (sib | $_1\square$ | $_2\square$ |
| As a relative (rel) |  |  |
| As a neighbour (Nei) | $_1\square$ | $_2\square$ |
| As a colleague at work (Wor) | $_1\square$ | $_2\square$ |
| As a member of my club/church (Chur) | $_1\square$ | $_2\square$ |
| As a fellow citizen/Kenyan (Cit) | $_1\square$ | $_2\square$ |
| As a visitor in Kenya (VisK) | $_1\square$ | $_2\square$ |
| As a tenant (Tena) | $_1\square$ | $_2\square$ |

# Modified Genderism and Transphobia

**8. Modified Genderism and Transphobia Scale by Hill & Willoughby's 2005**

|  | Agree | Disagree |
|---|---|---|
| 1. I would beat a man who behaved like a woman (gts1) | 1 ☐ | 2 ☐ |
| 2. I would beat up my boy child if he behaved like a girl (gts2) | 1 ☐ | 2 ☐ |
| 3. I would beat up my girl child if she behaved like a boy (gts3) | 1 ☐ | 2 ☐ |
| 4. Men should not change to women (gts4) | 1 ☐ | 2 ☐ |
| 5. Women should not change to men (gts5) | 1 ☐ | 2 ☐ |
| 6. Men who change to women are gay men (gts6) | 1 ☐ | 2 ☐ |
| 7. Transgender people should be killed (gts7) | 1 ☐ | 2 ☐ |
| 8. Transgender people should be denied health services by the government (gts8) | 1 ☐ | 2 ☐ |
| 9. Transgender people should be arrested and imprisoned (gts9) | 1 ☐ | 2 ☐ |
| 10. Transgender people should be accepted as normal members of the society (gts10) | 1 ☐ | 2 ☐ |

# SDS Classes

- **Social distance scale (SDS)**: Measures levels of comfort, acceptance and stigma among respondents towards TG persons

- Three classes derived from scores

| SDS Classes | Scores |
|---|---|
| No Stigma (NS) | 8 |
| Moderate Stigma (MS) | 9 – 13 |
| Great Stigma (GS) | 14 - 16 |

# GTS Classes

- **Genderism and Transphobia Scale (GTS):** measures levels of transphobia, acceptance and tendency for anti-transgender violence among respondents towards transgender persons

- Three classes derived from respondents' scores
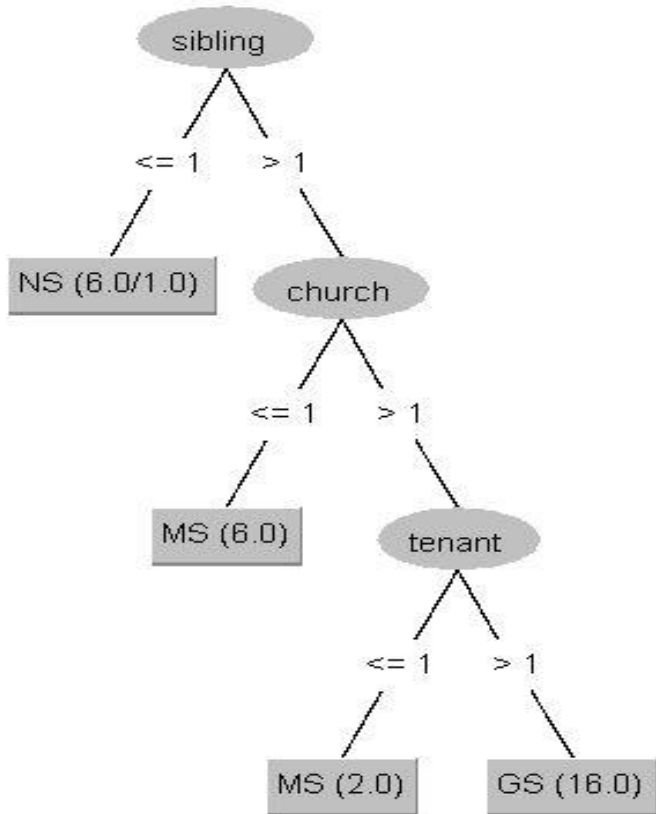
| GTS Classes | Scores |
|---|---|
| No Transphobia (NT) | 20 |
| Moderate Transphobia (MT) | 16 - 19 |
| Great Transphobia (GT) | 10 - 15 |

# Data Mining Tasks

- Data mining tasks were implemented using WEKA 3.8

- Models were developed using the following:

i.  Classification - Decision tree learning (C4.5)

ii. Clustering - K-Means clustering

# RESULTS

# Decision Tree Classification - SDS Data



| Code | |
|------|---|
| <=1 | Comfortable |
| >1 | Uncomfortable |
| NS | No Stigma |
| MS | Moderate Stigma |
| GS | Great Stigma |

**Sibling**= comfortable or uncomfortable having a transgender sibling
**Church**=comfortable or uncomfortable having a transgender churchmate
**Tenant**=comfortable or uncomfortable having a transgender tenant

# Summary - J48 Classifier (SDS Data)

```
Time taken to build model: 0.01 seconds

=== Stratified cross-validation ===
=== Summary ===

Correctly Classified Instances          24               80      %
Incorrectly Classified Instances         6               20      %
Kappa statistic                          0.6721
Mean absolute error                      0.156
Root mean squared error                  0.3436
Relative absolute error                 38.303  %
Root relative squared error             76.0735 %
Total Number of Instances               30

=== Detailed Accuracy By Class ===

                TP Rate  FP Rate  Precision  Recall  F-Measure  MCC    ROC Area  PRC Area  Class
                1.000    0.040    0.833      1.000   0.909      0.894  0.960     0.833     NS
                0.667    0.143    0.667      0.667   0.667      0.524  0.786     0.715     MS
                0.813    0.143    0.867      0.813   0.839      0.668  0.938     0.928     GS
Weighted Avg.   0.800    0.126    0.801      0.800   0.799      0.663  0.896     0.848

=== Confusion Matrix ===

  a  b  c   <-- classified as
  5  0  0 |  a = NS
  1  6  2 |  b = MS
  0  3 13 |  c = GS
```

# Final Clusters - (Biodata+SDS data)

```
Final cluster centroids:
                                   Cluster#
Attribute         Full Data            0            1            2
                    (30.0)         (8.0)        (6.0)       (16.0)
==================================================================
Age                 1.2667         1.375       1.1667         1.25
Gender              1.3667          1.25       1.6667       1.3125
educationL             2.5          2.25       2.6667       2.5625
meaning             1.9333         1.875       1.8333            2
sibling                1.8             2            1            2
relative            1.7333          1.75            1            2
neighbour           1.6667           1.5            1            2
workmate            1.6333         1.375            1            2
church              1.6333          1.25       1.1667            2
citizen             1.4667             1            1        1.875
visitorKenya        1.4667             1            1        1.875
tenant                 1.6          1.25            1            2
classsds                GS            MS           NS           GS
```

# Decision Tree Classification - GTS Data
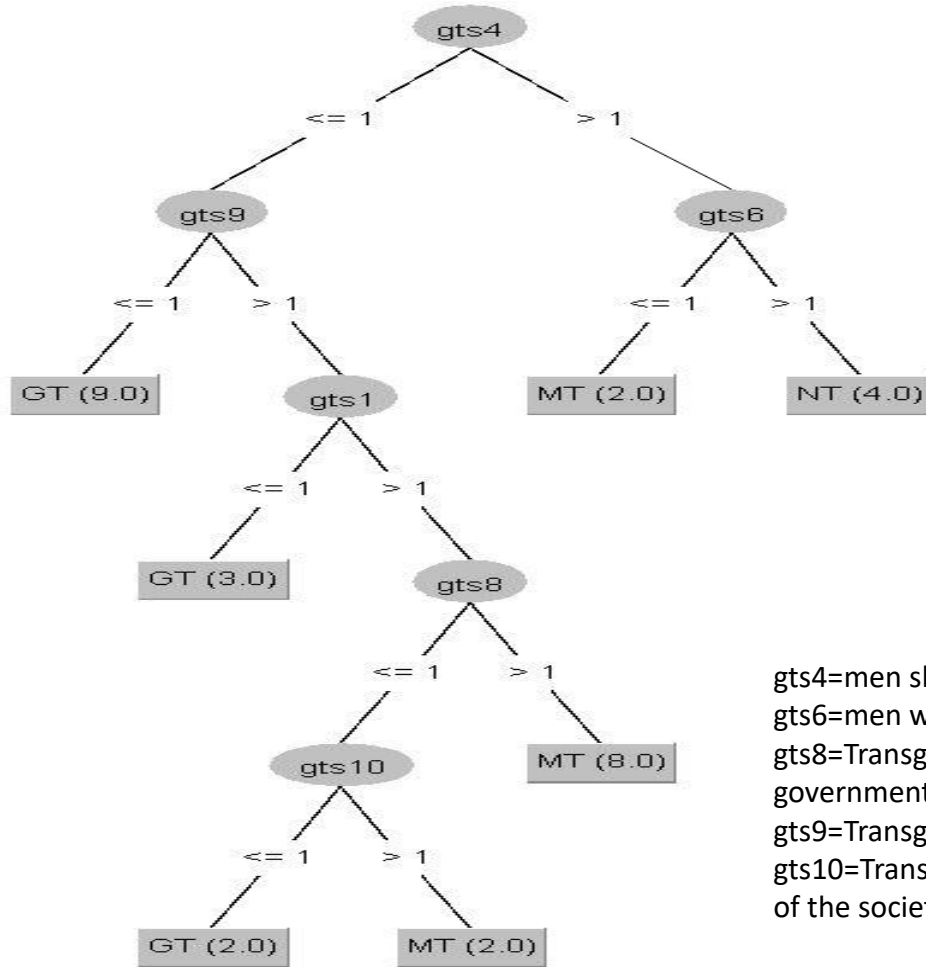


| Code | |
|------|--|
| <=1(1) | Agree |
| >1 (2) | Disagree |
| NT | No Transphobia |
| MT | Moderate Transphobia |
| GT | Great Transphobia |

gts4=men should not change to women
gts6=men who change to women are gay men
gts8=Transgender people should be denied health services by the government
gts9=Transgender people should be arrested and imprisoned
gts10=Transgender people should be accepted as normal members of the society

# Summary - J48 Classifier (GTS Data)

```
Time taken to build model: 0 seconds

=== Stratified cross-validation ===
=== Summary ===

Correctly Classified Instances          18              60      %
Incorrectly Classified Instances        12              40      %
Kappa statistic                          0.3333
Mean absolute error                      0.254
Root mean squared error                  0.4668
Relative absolute error                 61.6705 %
Root relative squared error            102.675  %
Total Number of Instances               30

=== Detailed Accuracy By Class ===
```

|  | TP Rate | FP Rate | Precision | Recall | F-Measure | MCC | ROC Area | PRC Area | Class |
|---|---|---|---|---|---|---|---|---|---|
|  | 0.500 | 0.077 | 0.500 | 0.500 | 0.500 | 0.423 | 0.952 | 0.786 | NT |
|  | 0.417 | 0.278 | 0.500 | 0.417 | 0.455 | 0.144 | 0.674 | 0.556 | MT |
|  | 0.786 | 0.313 | 0.688 | 0.786 | 0.733 | 0.473 | 0.797 | 0.700 | GT |
| Weighted Avg. | 0.600 | 0.267 | 0.588 | 0.600 | 0.591 | 0.335 | 0.768 | 0.654 |  |

```
=== Confusion Matrix ===

  a  b  c    <-- classified as
  2  2  0 |  a = NT
  2  5  5 |  b = MT
  0  3 11 |  c = GT
```
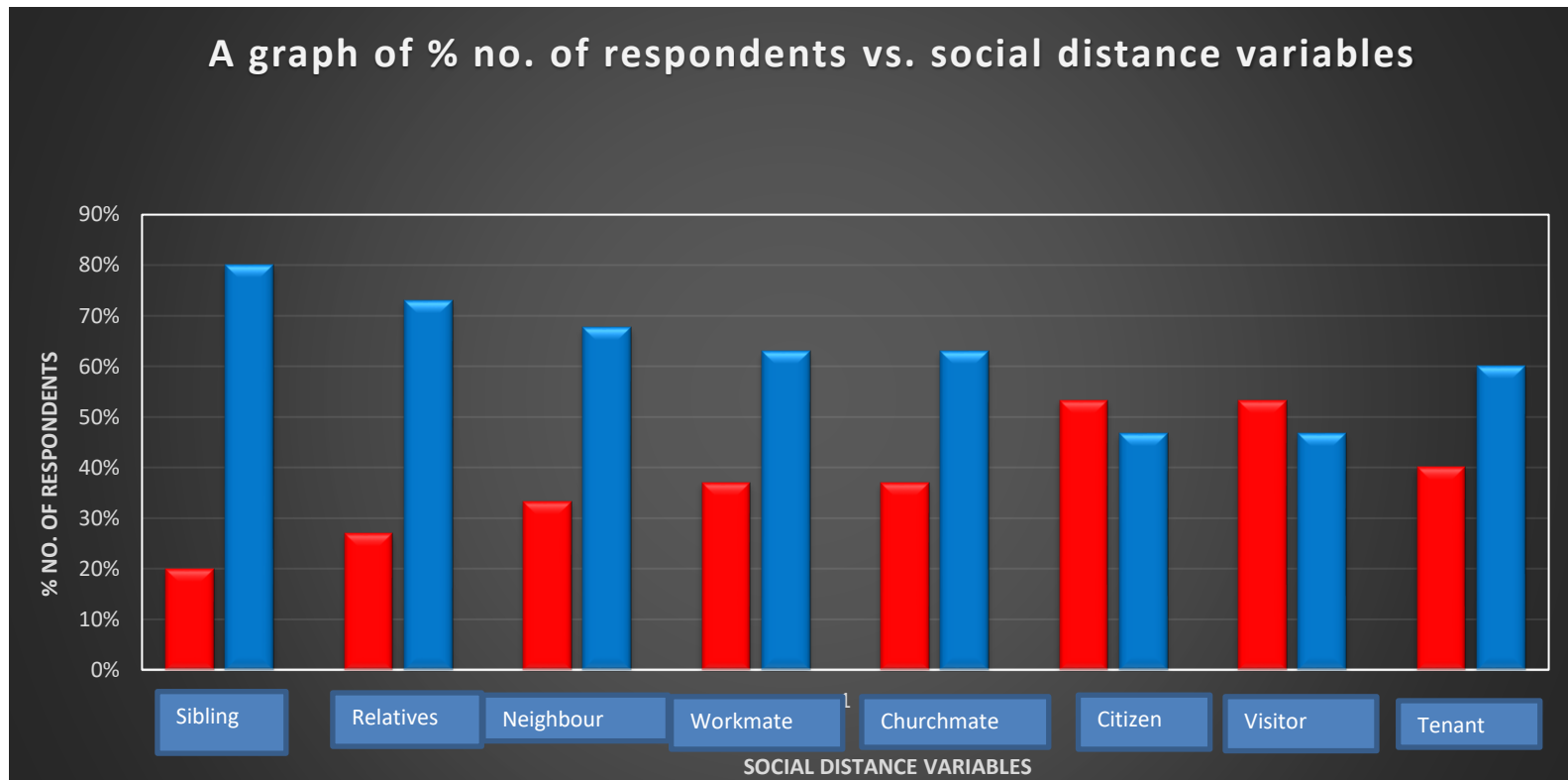
# Final Clusters- (Biodata+GTS data)

```
Final cluster centroids:
                                    Cluster#
Attribute       Full Data          0            1            2
                (30.0)          (6.0)        (14.0)       (10.0)
=================================================================
Age              1.2667             1        1.3571          1.3
Gender           1.3667           1.5        1.3571          1.3
educationL          2.5        2.3333        2.4286          2.7
meaning          1.9333        1.6667             2            2
gts1                1.8             2        1.5714            2
gts2             1.6667             2        1.3571          1.9
gts3             1.6667             2        1.3571          1.9
gts4                1.2             2             1            1
gts5             1.2333             2             1          1.1
gts6                1.4        1.6667        1.0714          1.7
gts7             1.8667             2        1.7143            2
gts8                1.6        1.8333        1.3571          1.8
gts9                1.7             2        1.3571            2
gts10            1.6333             2        1.3571          1.8
classgts             GT            NT            GT           MT
```

# Social Distance Scale - Bar Graph



A graph of % no. of respondents vs. social distance variables

Key

■ - Comfortable    ■ - Uncomfortable

# Findings of the Study

# Findings- SDS

- There were high levels of stigma among respondents
- 83.3% of respondents had moderate and great stigma (30% & 53.3% respectively)
- 16.7% of respondents had no stigma (NS)
- If respondents were comfortable with having a transgender sibling, THEN they had no stigma (NS) i.e they were also comfortable with all transgender persons
- If respondents were uncomfortable having a transgender sibling, but were comfortable having a transgender churchmate THEN they were classified as having moderate stigma (MS)
- Also, if respondents were uncomfortable having a transgender sibling, transgender churchmate but were comfortable having a transgender tenant, THEN they had moderate stigma (MS)
- If a respondent was uncomfortable with having a transgender sibling, transgender churchmate and transgender tenant, THEN they were classified as having great transphobia (GS)

# Findings- SDS (cont.)

- Respondents in the NS class were younger compared with those in MS and GS classes and clusters

- The NS class and cluster had more female respondents than male respondents. MS and GS classes and clusters had more male respondents

- Education level had no effect on levels of stigma and transphobia among study respondents

# Findings- GTS

- 86.7% of respondents had moderate transphobia (MT) and great transphobia (GT) (40% and 46.7% respectively)

- 13.3% of respondents had no transphobia (NT)

- 63.3% of respondents agreed transgender persons should be accepted in Kenya's society

# Findings- GTS (cont.)

- If respondents disagreed with gts4 (Men should not change to women) and gts6 (Men who change to women are gay), then they had no transphobia (NT)

# Findings- GTS (cont.)

- If respondents disagreed with gts4 (men should not change to women), but agreed with gts6 (Men who change to women are gay men) then they had moderate transphobia (MT)

# Findings- GTS (cont.)

- If respondents agreed with gts4 (Men should not change to women), but disagreed with: gts9 (Transgender people should be arrested and imprisoned), gts1 (I would beat up a man who behaved like a woman) and gts8 (Transgender people should be denied healthcare services by the government) THEN they had moderate transphobia (MT)

# Findings- GTS (cont.)

- If respondents agreed with gts4 (Men should not change to women) and gts9 (Transgender people should be arrested and imprisoned) THEN they had great transphobia (GT)

# Association Between SDS & GTS
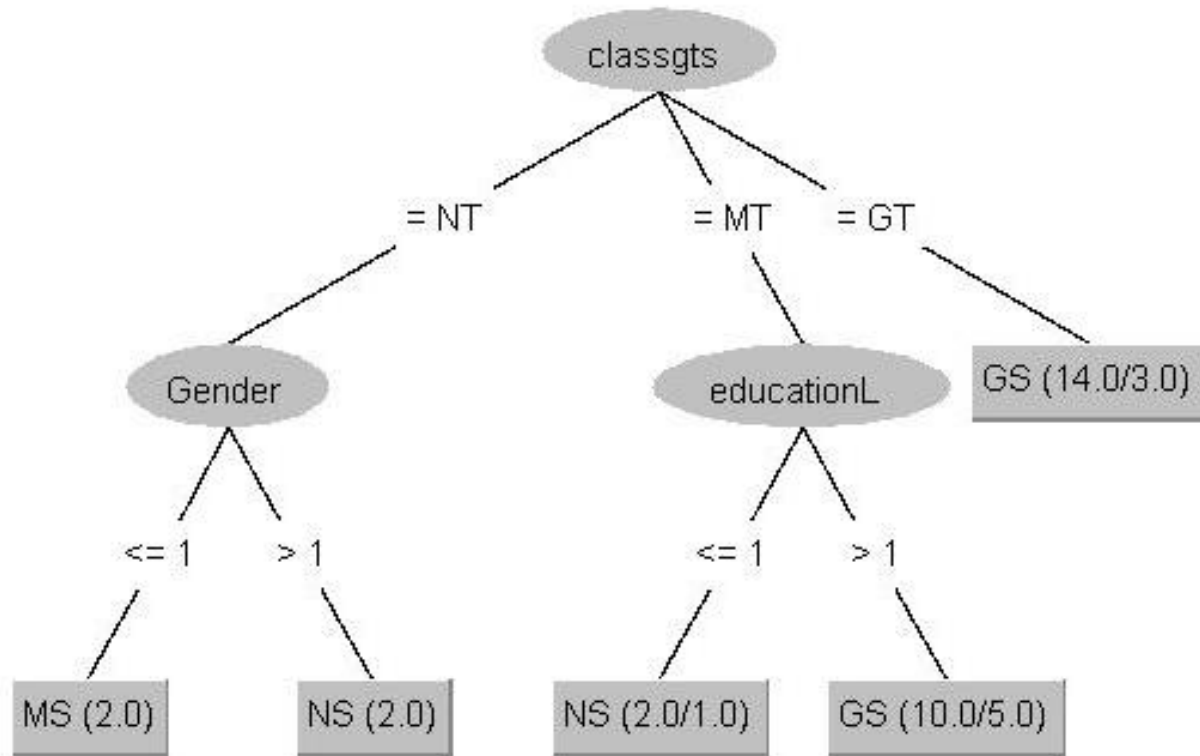
# Association Between SDS & GTS (cont.)
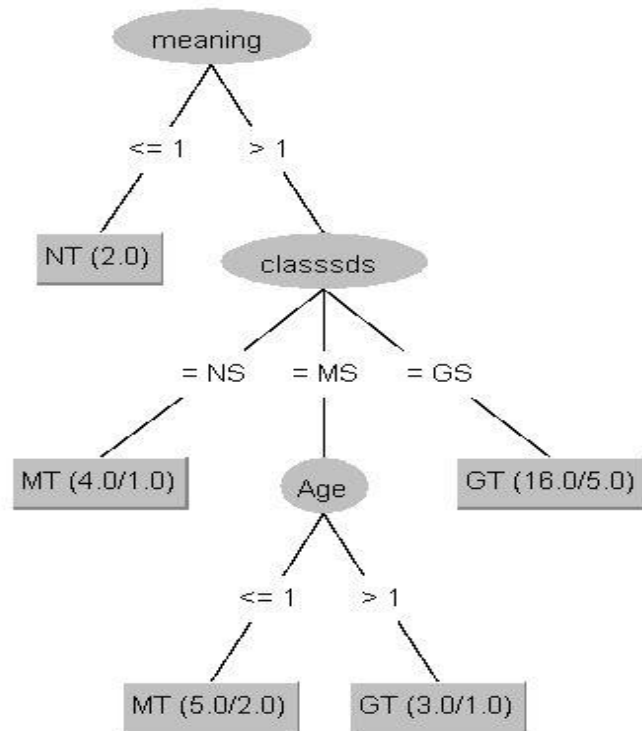
# Association Between SDS & GTS (cont.)

- If respondents had great transphobia (GT) THEN they also had great stigma (GS)
- If respondents had moderate transphobia (MT), and their education level was primary, THEN they had no stigma (NS)
- If respondents had MT and they education level was secondary or tertiary, THEN they had great stigma
- If respondents had NT, and their gender was male THEN they had MS
- If respondents had NT, and their gender was female THEN they had NS

# Association Between SDS & GTS (cont.)

- If respondents knew the meaning of the term transgender THEN they had no transphobia (NT)
- IF respondents did not know the meaning of the term transgender, and had NS, THEN they had moderate transphobia (MT)
- If respondents did not know the meaning of the term transgender, and had great stigma (GS), THEN they had great transphobia (GT)
- If respondents did not know the meaning of the term transgender and had moderate stigma (MS), and were between 18 and 35 years old, THEN they had MT
- If respondents did not know the meaning of the term transgender and had moderate stigma (MS), and were 36 years old or above, THEN they had GT

# Lessons

# Lessons

- There are high levels of stigma, genderism and transphobia towards transgender persons among Kenyans.
- There were low levels of public acceptance, comfort and tolerance for sex change and transgender persons in Kenya
- Despite these, a significant section of Kenyans are of the opinion that transgender persons ought to be accepted as normal members of the society
- Kenyans who accept their transgender siblings have no anti-transgender stigma
- Most Kenyans express great discomfort having a transgender sibling or relative
- Most Kenyans are comfortable with transgender people if they have no contact or relationship with them e.g. transgender tourists

# Lessons (cont.)

- Kenyans with great anti-transgender stigma express high levels transphobia

- Kenyans who know the meaning of transgender have low levels of transphobia and anti-transgender stigma

- Anti-transgender stigma and transphobia are common among persons of the male gender

- Education does not reduce levels of anti-transgender stigma and transphobia

# Lessons (cont.)

- Kenyans with no transphobia approve sex change and do not perceive transgender persons as homosexuals

- Kenyans with moderate transphobia approve sex change but perceive those who change sex as homosexuals

- Kenyans with great transphobia disapprove sex change and approve arrest and imprisonment of transgender persons

# Recommendations

- Increase public sensitization campaigns to enhance awareness of transgender persons and their issues among members of the public
- Improve quality of education (primary, secondary and tertiary) to equip learners with accurate knowledge of transgenderism and gender diversities
- Increase legal recognition of transgender persons e.g. change of names, gender marks and photos in official documents (birth certificates, national identity cards, passports, academic certificates etc)
- Increase legal protection of transgender persons i.e. development and implementation of laws, policies and administrative action protecting transgender persons from discrimination, violence and persecution
- Increased public visibility of diverse transgender persons e.g. male-to-female and female-to-male
- Enhance empowerment/capacity of transgender persons to sensitize members of the public using mainstream and social media
- Increased separation or distinction of transgenderism from homosexuality
- Increased sensitization and support for families of transgender persons
- Empowerment of institutions e.g. religious groups, healthcare providers, police and other service providers to embrace and nurture transgender persons in Kenya's society

# Limitations

- Study underpowered due to small sample size (n=30)
- Study respondents were drawn from less than half the number of Kenyan counties i.e. 22 counties

# Appendix One - Questionnaire

**Bio data**

1. Age            _____

2. Gender      _____

3. Place of residence        _____

4. Profession          _____

5. Education level   _____


6. Do you know the meaning of the term transgender?

Yes

No

If yes, what is the participants definition of the term transgender
:..............................................................................................................................
.......

# Appendix One (cont.)

**7. Modified Bogardus Social Distance Scale**

Please indicate how comfortable or uncomfortable you would personally feel having a transgender person as:

|  | Comfortable | Uncomfortable |
|---|---|---|
| As a close sibling (sib | ₁☐ | ₂☐ |
| As a relative (rel) |  |  |
| As a neighbour (Nei) | ₁☐ | ₂☐ |
| As a colleague at work (Wor) | ₁☐ | ₂☐ |
| As a member of my club/church (Chur) | ₁☐ | ₂☐ |
| As a fellow citizen/Kenyan (Cit) | ₁☐ | ₂☐ |
| As a visitor in Kenya (VisK) | ₁☐ | ₂☐ |
| As a tenant (Tena) | ₁☐ | ₂☐ |

# Appendix One (cont.)

**8. Modified Genderism and Transphobia Scale by Hill & Willoughby's 2005**

|  | Agree | Disagree |
|---|---|---|
| 1. I would beat a man who behaved like a woman (gts1) | 1☐ | 2☐ |
| 2. I would beat up my boy child if he behaved like a girl (gts2) | 1☐ | 2☐ |
| 3. I would beat up my girl child if she behaved like a boy (gts3) | 1☐ | 2☐ |
| 4. Men should not change to women (gts4) | 1☐ | 2☐ |
| 5. Women should not change to men (gts5) | 1☐ | 2☐ |
| 6. Men who change to women are gay men (gts6) | 1☐ | 2☐ |
| 7. Transgender people should be killed (gts7) | 1☐ | 2☐ |
| 8. Transgender people should be denied health services by the government (gts8) | 1☐ | 2☐ |
| 9. Transgender people should be arrested and imprisoned (gts9) | 1☐ | 2☐ |
| 10. Transgender people should be accepted as normal members of the society (gts10) | 1☐ | 2☐ |

# Appendix Two - Respondents' Counties

- Mombasa, Siaya, Nairobi, Isiolo, Nyandarua, Kiambu, Machakos, Uasin Gishu, Kajiado, Kakamega, Nyeri, Kilifi, Busia, Baringo, Migori, Kisii, Kwale, Murang'a, Tharaka Nithi, Nakuru, Homa Bay & Kisumu